

I. SUMMARY & CONCLUSIONS

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ROSEBURG
DISTRICT ECONOMIC
SUPPLEMENT

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III. RELATIONSHIP OF LAND RESOURCES TO ECONOMIC ACTIVITY

- A. Timber
- B. Livestock Forage
- C. Minerals
- D. Recreation
- E. Water

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- #2. Population and Employment Study - December 1969 - Prepared by Bureau of Governmental Research and Service - University of Oregon for the Douglas County Planning Commission.
- #3. Oregon Economic Statistics - 1969 - Bureau of Business and Economic Research - University of Oregon.
- #4. Overall Economic Development Program - Douglas County, Oregon, April, 1970.
- #5. Water Temperature Prediction and Control Study, Umpqua River Basin - State Water Resources Board, Salem, Oregon, February, 1964.
- #6. 1969 Water Resources Data for Oregon - Part I Surface Water Records - U. S. Geological Survey in cooperation with State Engineer of Oregon and other agencies.
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- #8. Comprehensive Plan - Douglas County Parks, October 1967.
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- #10. Oregon Timber Industries 1968 - Wood Consumption and Mill Characteristics - Published by Oregon Dept. of Forestry, and the Pacific N.W. Forest and Range Experiment Station.
- #11. Biennial Report 1969-70 Oregon State Game Commission.

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- #10. Oregon Timber Industries 1968 - Wood Consumption and Mill Characteristics - Published by Oregon Dept. of Forestry, and the Pacific N.W. Forest and Range Experiment Station.
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Summary and Conclusions

The Human Economy of Douglas County

Population: The 1970 census placed the county population at 71,743 people, a 4.8% increase over 1960, and ranking seventh in the state in total number. During the past decade the actual increase has been about half of advance estimates.

Income: According to the State Employment Office, the average annual gross family income in late 1970 was \$7600 in Douglas County. Using an inflation rate of 5%, the 1969 average income would be \$7220.

In 1964, a U.S. Census of Business report placed the effective buying income per family at \$5710, compared to a state average of \$5892. The county-wide total income was placed at \$119,000,000 with all retail sales of \$82,586,000.

Housing: The 1960 census of housing in Douglas County considered a total of 3871 units, with 8.6 percent deteriorating, 1.7 percent dilapidated, and 89.7 percent sound units, and overall to be slightly below what would be considered average. Douglas County ranks 19th in the state in regard to good housing.

Employment: The average rate of unemployment in 1969 was placed at 6.5 percent, applied to an average work force of 28,810. Lumber and wood products employed 7550 of the above total. However, present Employment Office figures of March 1971 place timber based employment at 7320, with an unemployment rate of 9.7 - 8.3 percent during the month.

Douglas County apparently has the highest dependency on timber based employment of the entire Douglas-fir region. The figure is placed at 99.4% in P.N.W.-76 Research Note by Maki, Schallau and Bouter.

Lumber and wood products manufacturing accounts for 37.5 percent of the total wage and salary employment in the county.

Contribution of BLM Timber Production to Douglas County:

Present Situation:

In 1969 Douglas County was the top timber producing county in the state for the fifth straight year with a log harvest of 1,671,192 MBF. The district's portion of this cut was 201,803 MBF (or 12%), with sales that year of 253,882 MBF (15%). It appears that the proportion of the cut from private timberlands is declining at a rate of 4-5 percent per year.

Summary and Conclusions

The Human Economy of Douglas County

Population: The 1970 census placed the county population at 17,743 people, a 4.8% increase over 1960, and ranking seventh in the state in total number. During the past decade the actual increase has been about half of advance estimates.

Income: According to the State Employment Office, the average annual gross family income in late 1970 was \$7500 in Douglas County. Using an inflation rate of 5%, the 1969 average income would be \$7220.

In 1964, a U.S. Census of Business report placed the effective buying income per family at \$2710, compared to a state average of \$2892. The county-wide total income was placed at \$11,000,000 with all retail sales of \$82,386,000.

Housing: The 1960 census of housing in Douglas County considered a total of 3871 units, with 8.6 percent deteriorating, 1.7 percent dilapidated, and 89.7 percent sound units, and overall to be slightly below what would be considered average. Douglas County ranks 15th in the state in regard to good housing.

Employment: The average rate of unemployment in 1969 was placed at 6.5 percent, applied to an average work force of 28,810. Lumber and wood products employed 7550 of the above total. However, present Employment Office figures of March 1971 place timber based employment at 7320, with an unemployment rate of 9.7 - 8.3 percent during the month.

Douglas County apparently has the highest dependency on timber based employment of the entire Douglas-Fir region. The figure is placed at 98.4% in P.W.W.-76 Research Note by Mark Schellman and Bouter.

Lumber and wood products manufacturing accounts for 27.3 percent of the total wage and salary employment in the county.

Contribution of BLM Timber Production to Douglas County:

Present Situation:

In 1969 Douglas County was the top timber producing county in the state for the fifth straight year with a log harvest of 1,671,192 MBF. The district's portion of this cut was 201,803 MBF (or 12%), with sales that year of \$23,882 MBF (12%). It appears that the proportion of the cut from private timberlands is declining at a rate of 4-5 percent per year.

Timber: An estimate of 13 man hours can be used as necessary to process one thousand board feet of timber from stump to boards. The District's contribution therefore adds up to 1261 man years of employment in 1969. Another rule of thumb used in this region is that 1 million board feet of timber creates 10 jobs in the industry, or a total of 2000 jobs. Therefore log harvest from BLM (Roseburg District) provided 27% of the jobs in the timber industry in 1969 with a payroll of as much as \$14,440,000.

Moving the harvest cut from the stump to the mill requires an expenditure of an estimated $3\frac{1}{4}$ million dollars based on average equipment cost.

Estimated Douglas County personal income - 1969 =
 $28,810 \text{ (labor force)} \times \$7220 = \$208,008,000$

Timber industry dependency = 99%, therefore \$205,928,000

District timber harvest: 12% of total = \$24,711,000

Therefore, $\$24,711,000 \div 201,803 \text{ MBF} = \$122 \text{ per M}$ return of economic benefit for every MBF sold.

Projection to 1980: The third quarter 1970 bulletin of PNW Experiment Station, Production, Prices Employment and Trade indicates that during the period of 1960-69, softwood lumber production in western Oregon and Washington went up a scant 1 percent while U.S. softwood plywood production has gone up $82\frac{1}{2}$ percent.

Economic studies have projected a 50% increase in demand for wood products by 1980. At sustained yield management levels of 1970, a 25% increased harvest cut is foreseeable with advances in utilization, both in the woods and in the mill, tree fertilization, increasing intermediate harvest cut practices, better site analysis, and shorter rotations. Additional management funding to accomplish this inventorying and planning may be required. This would place the projected allowable cut at 257,000 MBF in 1980, with a possible increase of 350-400 new jobs. However, the number of employees in timber based manufacturing appears to be declining, most likely the result of increased job efficiency. Secondary manufacture of wood products will most likely increase in this area, providing more jobs. Log and wood export restrictions may need to be increased.

Timber: An estimate of 13 man hours can be used as necessary to process one thousand board feet of timber from stump to boards. The District's contribution therefore adds up to 1361 man years of employment in 1988. Another rule of thumb used in this region is that 1 million board feet of timber creates 10 jobs in the industry, or a total of 3000 jobs. Therefore log harvest from BLM (Kootenai District) provided 2% of the jobs in the timber industry in 1988 with a payroll of as much as \$14,400,000.

Moving the harvest out from the stump to the mill requires an expenditure of an estimated 3 million dollars based on average equipment cost.

Estimated Douglas County personal income - 1988 =
 $28,810 \text{ (Labor force)} \times \$1220 = \$35,148,000$

Timber industry dependency = 92%, therefore $\$35,148,000 \times .92 = \$32,336,160$
 District timber harvest: 12% of total = $\$32,336,160 \times .12 = \$3,880,339$
 Therefore, $\$3,880,339 \div 201,303 \text{ MBF} = \$19.3$ per M return of economic benefit for every MBF sold.

Projections to 1990: The third quarter 1970 bulletin of the Department of Commerce, Production, Prices, Employment and Trade indicates that during the period of 1960-69, softwood lumber production in western Oregon and Washington went up a scant 1 percent while U.S. softwood production has gone up 83 percent.

Economic studies have projected a 20% increase in demand for wood products by 1990. At sustained yield management levels of 1970, a 25% increased harvest and its foreseeable with advances in utilization, both in the woods and in the mill, tree fertilization, increasing immediate harvest and practices, better site analysis, and shorter rotations. Additional management planning to accomplish this inventorying and planning will be required. This would place the projected allowable cut at 227,000 MBF in 1990, with a possible increase of 350-400 new jobs. However, the number of employees in timber based manufacturing appears to be declining, most likely the result of increased job efficiency. Secondary manufacturers of wood products will most likely increase in this area, providing more jobs. Log and wood export restrictions may need to be increased.

Contribution of BLM's Recreation Resources to Douglas County:

Present Situation: BLM's 14 developed sites in Douglas County serve about 312,900 people, as determined by a proportional share of this type of facilities. Applying a user benefit of 50¢ per day, this economic benefit equals \$156,450, which is of relatively minor significance to the county area and is primarily local use.

The goal of the county and the state is to achieve 2-3 acres of developed park per 100 residents. Present development is about half this amount. The tourist industry is the third largest industry in Oregon. Use of recreational areas along Interstate 5 declined in 1970 compared to 1969.

Potential: Water based recreation in the Umpqua River system has tremendous potential in meeting a trend and need within a 1-3 hour drive of metropolitan areas. A beginning has been made in the county with the recent construction of multi-purpose water storage dams in two small drainages east of Sutherlin.

The contribution of BLM lands to county recreation appears best oriented at present to developing highway type picnic and camping facilities on the North and South Umpqua Rivers, while preserving water quality at the best optimum levels.

1980 Projections: Two large South Umpqua River reservoirs are in planning phases - the Days Creek Dam and the Olalla Dam, and one of these may be starting before 1980. North Douglas County has an active Watershed Conservation Development Program under the SCS, and South Douglas will soon be establishing an SCS office in Roseburg for this purpose.

Recreation demand is expected to more than double by 1980, which indicates the use of BLM facilities should be increased from 136 to 408 picnic units, and camping units from 131 to 393. The projection is 500,000 user visits per year, spending \$4,712,960 in the area, for a total economic benefit of \$9,000,000.

Total value of deer harvest from BLM lands = \$72,320.

The 1968 elk kill statistical summary for the Southwest Game Management Region, indicates a 16 kill per square mile. The Batin and Willard Forest Management Areas, totaling 342 square miles, is the principal elk habitat area of the district, and therefore the indicated elk kill on BLM lands is 55 head. Twenty three hunter days per kill are indicated x 55 = 1265 hunter days on BLM lands. At 50¢/day user benefit the value is \$632.50.

Fifty five head x 400 lb./head x 30¢/lb. = \$66,000

The economic value of elk hunting on BLM lands is estimated to be \$13,320.

Contribution of BLM's Recreation Resources to Douglas County

Present Situation: BLM's 14 developed sites in Douglas County serve about 315,000 people, as determined by a proportional share of this type of facilities. Applying a user benefit of 50¢ per day, this economic benefit equals \$158,450, which is of relatively minor significance to the county area and is primarily local use.

The goal of the county and the state is to achieve 3-5 acres of developed park per 100 residents. Present development is about half this amount. The tourist industry is the third largest industry in Oregon. Use of recreational areas along Interstate 5 declined in 1970 compared to 1969.

Potential: Water based recreation in the Umpqua River system has tremendous potential in meeting a trend and need within a 1-2 hour drive of metropolitan areas. A beginning has been made in the county with the recent construction of multi-purpose water storage dams in two small drainages east of Sutherlin.

The contribution of BLM lands to county recreation appears best oriented at present to developing highway type picnic and camping facilities on the North and South Umpqua Rivers, while preserving water quality at the best optimum levels.

1981 Projections: Two large South Umpqua River reservoirs are in planning phases - the Jays Creek Dam and the Olla Dam, and one of these may be starting before 1980. North Douglas County has an active Watershed Conservation Development Program under the SCS, and South Douglas will soon be establishing an SCS office in Roseburg for this purpose.

Recreation demand is expected to more than double by 1990, which indicates the use of BLM facilities should be increased from 130 to 408 picnic units, and camping units from 191 to 382. The projection is 500,000 user visits per year, equalling \$4,712,800 in the area, for a total economic benefit of \$9,000,000.

CONTRIBUTION OF BLM RESOURCES TO GRAZING

Present Situation:

Agriculture has remained second in economic importance in Douglas County but BLM lands exert very little impact in support of this industry.

There are 43 permits covering 52,450 acres with an estimated 4600 AUM's producing an annual rental of \$2647.22.

Douglas County leads the state in sheep and fat lamb production, primarily because of early lambing and early spring grazing on private lands.

Projections to 1980

Irrigation from multi-purpose water storage in upstream dams does have the potential of doubling agricultural land use. BLM lands would contribute very little to increased tillable acreage, but pasture improvement could very easily have more impact in the future as land use intensifies.

CONTRIBUTION OF BLM TO HUNTER RECREATION

Present Situation:

In 1964 there were 6991 big game hunters in Douglas County. About 9648 hunter days are creditable to BLM lands, with an estimated 2500 hunter days considered to be non-local, spending about \$19,260 in the area. Local use predominates.

In the 1968 deer kill summarizations by the State Game Commission, there are 6 game units significant to our district, which indicate an average deer kill of 1.74 deer per square mile. The district contains 660 square miles $\times 1.74 = 1148$ deer killed on BLM lands. Hunter success in the 6 units indicated 8.6 days per deer.

$1148 \text{ deer} \times 8.6 \text{ days} \times \$5/\text{day user benefit} = \$46,490.$

Average deer weight 95 lbs. live weight or 90 lbs. dressed.

Weight @ 50¢/lb. = \$22.50

$1148 \text{ deer} \times \$22.50 = \$25,830$

Total value of deer harvest from BLM lands = \$72,320.

The 1968 Elk kill statistical summary for the Southwest Game Management Region, indicates a .16 kill per square mile. The Drain and Dillard Forest Management Areas, totaling 342 square miles, is the principal elk habitat area of the district, and therefore the indicated elk kill on BLM lands is 55 head. Twenty three hunter days per kill are indicated $\times 55 = 1265$ hunter days on BLM lands. At \$6/day user benefit the value is \$7590.

$\text{Fifty five head} \times 400 \text{ lb./head} \times 50\text{¢/lb.} = \$11,000$

The economic value of elk hunting on BLM lands is estimated to be \$18,590.

CONTRIBUTION OF BLM RESOURCES TO GRAZING

Present Situation:

Agriculture has remained second in economic importance in Douglas County but BLM lands exert very little impact in support of this industry.

There are 43 permits covering 22,420 acres with an estimated 4600 AUM's producing an annual rental of \$2047.22.

Douglas County leads the state in sheep and fat lamb production, primarily because of early lambing and early spring grazing on private lands.

Projections to 1980

Irrigation from multi-purpose water storage in upstream dams does have the potential of doubling agricultural land use. BLM lands would contribute very little to increased tillable acreage, but pasture improvement could very easily have more impact in the future as land use intensifies.

CONTRIBUTION OF BLM TO HUNTER RECREATION

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In 1964 there were 6991 big game hunters in Douglas County. About 9548 hunter days are creditable to BLM lands, with an estimated 2500 hunter days considered to be non-local, spending about \$19,260 in the area. Local use predominates.

In the 1968 deer kill summarizations by the State Game Commission, there are 6 game units significant to our district, which indicate an average deer kill of 1.74 deer per square mile. The district contains 660 square miles x 1.74 = 1148 deer killed on BLM lands. Hunter success in the 6 units indicated 8.6 days per deer.

1148 deer x 8.6 days x \$2/day user benefit = \$46,490.
Average deer weight 92 lbs. live weight or 90 lbs. dressed.
Weight @ 20¢/lb. = \$22.50
1148 deer x \$22.50 = \$25,830

Total value of deer harvest from BLM lands = \$72,320.

The 1968 Elk kill statistical summary for the Southwest Game Management Region, indicates a .16 kill per square mile. The Drain and Dillard Forest Management Areas, totaling 342 square miles, is the principal elk habitat area of the district, and therefore the indicated elk kill on BLM lands is 55 head. Twenty three hunter days per kill are indicated x 55 = 1555 hunter days on BLM lands. At \$6/day user benefit the value is \$7590.

Fifty five head x 400 lb./head x 20¢/lb. = \$11,000
The economic value of elk hunting on BLM lands is estimated to be \$18,590.

1980 Projections

More recent Game Commission Bulletins indicate a 5.8 percent increase in 1970 license sales over 1969 sales. No attempt has been made to relate this increase to deer or elk kill estimates, as it would have more validity when more recent and improved Game Division reports are released.

A system of estimating the percent of deer habitat on BLM lands, and then applying this percentage as a hunter dependency on BLM lands, does not have valid applicability in Western Oregon; the principal reasons being the ownership pattern and type of vegetative cover.

Contribution of BLM to Water Resources

Present Situation

The Umpqua River Basin system provides approximately 6,000,000 acre feet of water into tidewater. The 1969 water year, which extends from September 30 to October 1, indicated that 5,965,000 acre feet was gaged at Elkton, which has been accumulating water and weather records for 64 years, the oldest in the County. The average over this period is 5,387,000 acre feet. These output figures do not include diversions, legal or otherwise, irrigation or domestic, that occur upstream. Municipal water supply diversion is known.

In conjunction with the Water Resources Survey Office of this County, the present estimate of water yield from BLM lands is 16%. Based on average run off from above figures, the yield from BLM lands is therefore 860,920 acre feet. The County office prescribes a value figure for irrigation water at \$12 to \$19.50 per acre foot at point of application, with domestic water about 1/3 more in this area. No attempt has been made to establish a water value in the stream. Multiplying 860,920 acre x \$12 equals a figure of \$10,331,040, which is a potential indicator of value.

Water must be considered as a renewable resource as it can be re-used a number of times, and this type of management in the future must be considered.

Projection to 1980

It is doubtful if the North Umpqua Main Stem will ever have any storage dams constructed. The South Umpqua system most likely will, with construction of one major storage dam well under way by 1980. The Corps of Engineers report on the Days Creek Dam is expected to be presented to the Congress in December, 1971.

1980 Projections

More recent Game Commission Bulletin indicates a 5.8 percent increase in 1970 license sales over 1969 sales. No attempt has been made to relate this increase to deer or elk kill estimates, as it would have more validity when more recent and improved Game Division reports are released.

A system of estimating the percent of deer habitat on BLM lands, and then applying this percentage as a hunter dependency on BLM lands, does not have valid applicability in Western Oregon; the principal reasons being the ownership pattern and type of vegetative cover.

Contribution of BLM to Water Resources

Present Situation

The Umpqua River Basin system provides approximately 6,000,000 acre feet of water into the river. The 1969 water year, which extends from September 30 to October 1, indicated that 5,965,000 acre feet was gaged at Elton, which has been accumulating water and weather records for 64 years, the oldest in the County. The average over this period is 5,387,000 acre feet. These output figures do not include diversions, legal or otherwise, irrigation or domestic, that occur upstream. Municipal water supply diversion is known.

In conjunction with the Water Resources Survey, Office of this County, the present estimate of water yield from BLM lands is 16%. Based on average run off from above figures, the yield from BLM lands is therefore 860,920 acre feet. The County office prescribes a value figure for irrigation water at \$12 to \$19.50 per acre foot at point of application, with domestic water about 1/3 more in this area. No attempt has been made to establish a water value in the stream. Multiplying 860,920 acre x \$12 equals a figure of \$10,331,040, which is a potential indicator of value.

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It is doubtful if the North Umpqua Main Stem will ever have any storage dams constructed. The South Umpqua system most likely will, with construction of one major storage dam well under way by 1980. The Corps of Engineers report on the Days Creek Dam is expected to be presented to the Congress in December, 1971.

Contribution of BLM to Fishing

Present Situation

Catch figures of the commercial fishery are not known as to availability, so their relationship to the Umpqua watershed is not estimated. Catch information on resident and anadromous fish within the County are inadequate.

A judgment estimate is made that BLM lands contribute 25% to the fishery resource. There were about 22,000 salmon and steelhead fishermen in the County in 1965, spending about 220,000 fisherman days. Of this 169,000 fishing days were by non-local people. The total expenditure is estimated at \$1,826,500. From this, \$456,600 is attributable to BLM lands.

1980 Projection

Douglas County population increased 4.8% in the past decade. Fishing demand is anticipated to increase 3.3%. Applying a 6% increase to the present situation, figures above indicate that \$424,000 will be attributable to BLM lands.

Contribution of BLM to Fishing

Present Situation

Catch figures of the commercial fishery are not known as to availability so their relationship to the Uncompas watershed is not estimated. Catch information on resident and anadromous fish within the County are inadequate.

A judgment estimate is made that BLM lands contribute 22% to the fishery resource. There were about 22,000 salmon and steelhead fishermen in the County in 1985, spending about 220,000 fisherman days. Of this 169,000 fishing days were by non-local people. The total expenditure is estimated at \$1,826,500. From this, \$426,600 is attributable to BLM lands.

1980 Projection

Douglas County population increased 4.8% in the past decade. Fishing demand is anticipated to increase 3.3%. Applying a 6% increase to the present situation, figures above indicate that \$424,000 will be attributable to BLM lands.

Illustration I

District Summary of Production, Consumption and Needs Situation: Present and Projected

Item	Resource Products or Uses					
	Livestock Feed (AUM's)		Saw Timber (MBF)		Deer Hunting (User Days)	
	Total		Total		Total	
Present Situation:						
Production						
Consumption						
Needs (excess demand)						
Projection to 1980:						
Production						
Consumption						
Needs (excess demand)						

This table shows (among other things):

1. Extent to which resources on BLM lands and other lands are being over- or under-utilized at present, and what changes are expected in the near future.
2. Relative importance of BLM lands and resources in meeting present and future needs.
3. Possibility of competing needs for same lands or resources.

Illustration II

District Summary of Amount and Incidence of Values Arising from Use of BLM Resources

Type and Recipient	Estimated Value of Product or Use Per Unit			
	Livestock Feed (AUM)	Saw Timber (MEF)	Deer Hunting (User Day)	Other Resource Products

Monetary Value to:

1. BLM a/
2. Initial users b/
3. Local economies c/
4. National economy d/

Non-monetary Value to: e/

1. Initial users
2. Local communities
3. Major interest groups
 - a. _____
 - b. _____
 - c. _____
 - d. _____

a/ Exchange price - not necessarily market value.b/ Estimated market value.c/ Local income multipliers for Resource Products should be used. These multipliers will vary from one area to another.d/ No national income multipliers are used in this example. These may be required when significant quantities of a commodity are imported or exported at a national level.e/ A 10-point rating system is used in this example: 5-high, 4-medium high, 3-medium, 2-medium low, and 1-low. Values can be either positive or negative and should be assigned by persons intimately familiar with public attitudes and opinions.

III. Discussion

As shown in the preceding section, the results of the present study are in good agreement with those of the previous studies.

1. Effect of temperature on the rate of reaction

Temperature (°C)	Rate of reaction (mol/l·sec)
20	0.0012
30	0.0025
40	0.0050
50	0.0100

The rate of reaction increases with increasing temperature.

The activation energy of the reaction is 45 kJ/mol.

2. Effect of concentration on the rate of reaction

Concentration (mol/l)	Rate of reaction (mol/l·sec)
0.1	0.0012
0.2	0.0025
0.3	0.0038

The rate of reaction increases with increasing concentration.

3. Effect of catalyst on the rate of reaction

Catalyst	Rate of reaction (mol/l·sec)
None	0.0012
FeCl ₃	0.0025
K ₂ Cr ₂ O ₇	0.0050

The rate of reaction increases with increasing catalyst concentration.

The results of the present study are in good agreement with those of the previous studies.

The rate of reaction increases with increasing temperature, concentration, and catalyst concentration.

I. Introduction and Background

A. Purpose - The District Economic Supplement provides an analytical framework for determining, at the District level, the capability of BLM resources within the District to help meet present and projected needs and thus promote general Bureau objectives.

A similar document, The State Economic Profile, describes the present and projected structure of the State economy, examines the geographic correlation or resource capabilities and needs within and outside the State and appraises Bureau opportunities for meeting present and projected resource needs at the State level.

These two documents insure that the State Directors and District Managers have available, when making planning and program decisions, the data relating to (1) the nature, amount, and incidence of economic benefits resulting from the present use of public lands and (2) analysis and projection of the future supply, demand, and need for public lands and resources.

The State Profile and the District Supplement contain descriptive and analytical information relating to the needs of people and the availability of resources for satisfying these needs. They provide a detailed picture of State, regional, and local economics. The District Summary explains the significance of BLM resources to the local economy.

Much of the data used in the preparation of this supplement is several years old. As new information becomes available, the supplement should be up-dated to insure that our decisions are based on current statistics.

1. Introduction and Background

A. Purpose - The District Economic Supplement provides an analytical

framework for determining, at the District level, the capability of the resources within the District to help meet present and projected needs and thus promote general Bureau objectives.

A similar document, The State Economic Profile, describes the present and projected structure of the State economy, examines the geographic distribution of resource capabilities and needs within and outside the State and appraises Bureau opportunities for meeting present and projected resource needs at the State level.

These two documents insure that the State Director and District Managers have available, when making planning and program decisions, the data relating to (1) the nature, amount, and incidence of economic benefits resulting from the present use of public lands and (2) analysis and projection of the future supply, demand, and need for public lands and resources.

The State Profile and the District Supplement contain descriptive and analytical information relating to the needs of people and the availability of resources for satisfying those needs. They provide a detailed picture of State, regional, and local economies. The District Summary explains the significance of BLM resources to the local economy.

Much of the data used in the preparation of this supplement is several years old. As new information becomes available, the supplement should be updated to insure that our decisions are based on current statistics.

B. Analytical Areas

1. The District Statistical Region (DSR) is comprised of Douglas County only, within which the entire BLM District lies with the exception of 280 acres in Lane County. The Umpqua River watershed virtually outlines the county boundary.

Figure 1 is taken from one of the County Planning Commission booklets, and some statistical information of this report is applicable to specific regions of the County.

2. User Influence Zones are geographical areas to indicate the greater concentrations of people and industry, and how they relate to use of a resource. See figure 1.

a. The Coast Region is almost entirely within the Coos Bay BLM District. It contains Salmon Harbor - Winchester Bay, at the mouth of the Umpqua, which is one of the Pacific Coast's outstanding sports fisheries with 60,000 angler trips and catch of 500,000 pounds. It is the major project of the County Park Department. Recent valuation studies indicated a return in excess of \$6 million to the area and the State.

Reedsport indicated a population increase of 34.7 percent in the 1970 census over 1960.

b. The North Umpqua region is sparsely populated and almost entirely dependent on the timber industry and agriculture. The communities of Drain and Elkton are the population centers.

c. The Central Umpqua region is the center of population and business activity within the County. Industry is predominantly oriented to primary processing and supported by the timber base.

d. The South Umpqua region, the Tri-Cities area of Myrtle Creek, Riddle, and Canyonville, is actively growing in population and community organization. Mining and timber are predominant industries.

e. The East Umpqua region is primarily oriented toward timber growing, log production, and fishing recreation.

3. The Central and South Umpqua regions could be considered the principal Community Impact Areas, as they account for a significant proportion of the trade and economic transactions of the people of the County. Connecting of the North Central and South regions by Interstate 5 results in movement of people and resources over the County at such a rapid rate that there is little need to attempt to compute related monetary value of BLM resources below the County level. In the days of many

1. The District Statistical Region (DSR) is comprised of Douglas County only, within which the entire BLM District lies with the exception of 180 acres in Land County. The Upper River watershed virtually outlines the county boundary.

Figure 1 is taken from one of the County Planning Commission booklets, and some statistical information of this report is applicable to specific regions of the County.

2. User Influence Areas are geographical areas to indicate the greater concentrations of people and industry, and how they relate to use of a resource. See Figure 1.

a. The Coast Region is almost entirely within the Coast Bay BLM District. It contains Salmon Harbor - Winchester Bay, at the mouth of the Umpqua, which is one of the Pacific Coast's outstanding sport fisheries with 80,000 angler trips and catch of 500,000 pounds. It is the major project of the County Park Department. Recent valuation studies indicated a return in excess of \$5 million to the area and the State.

Reedsport indicated a population increase of 34.7 percent in the 1970 census over 1950.

b. The North Umpqua region is sparsely populated and almost entirely dependent on the timber industry and agriculture. The communities of Drain and Elsie are the population centers.

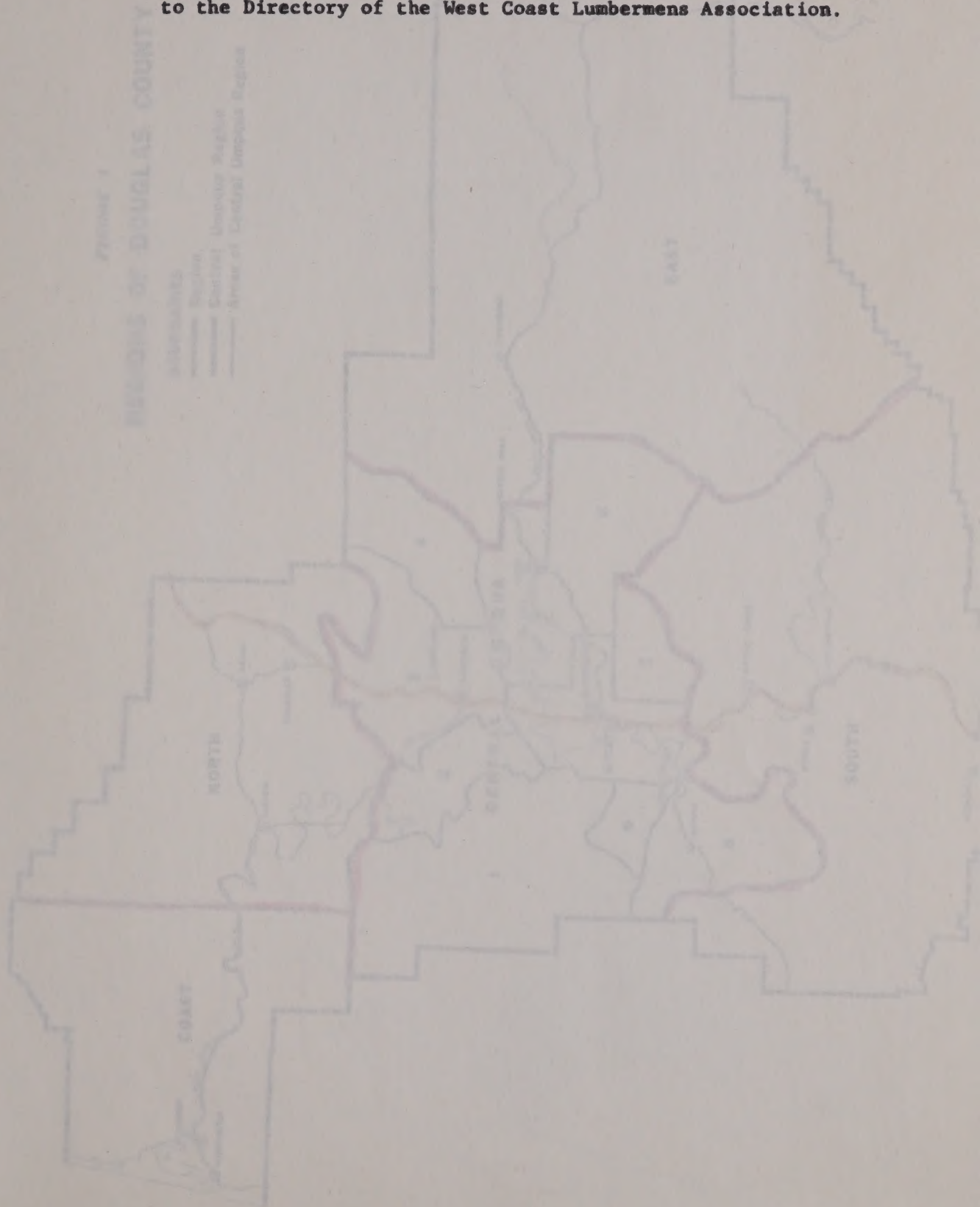
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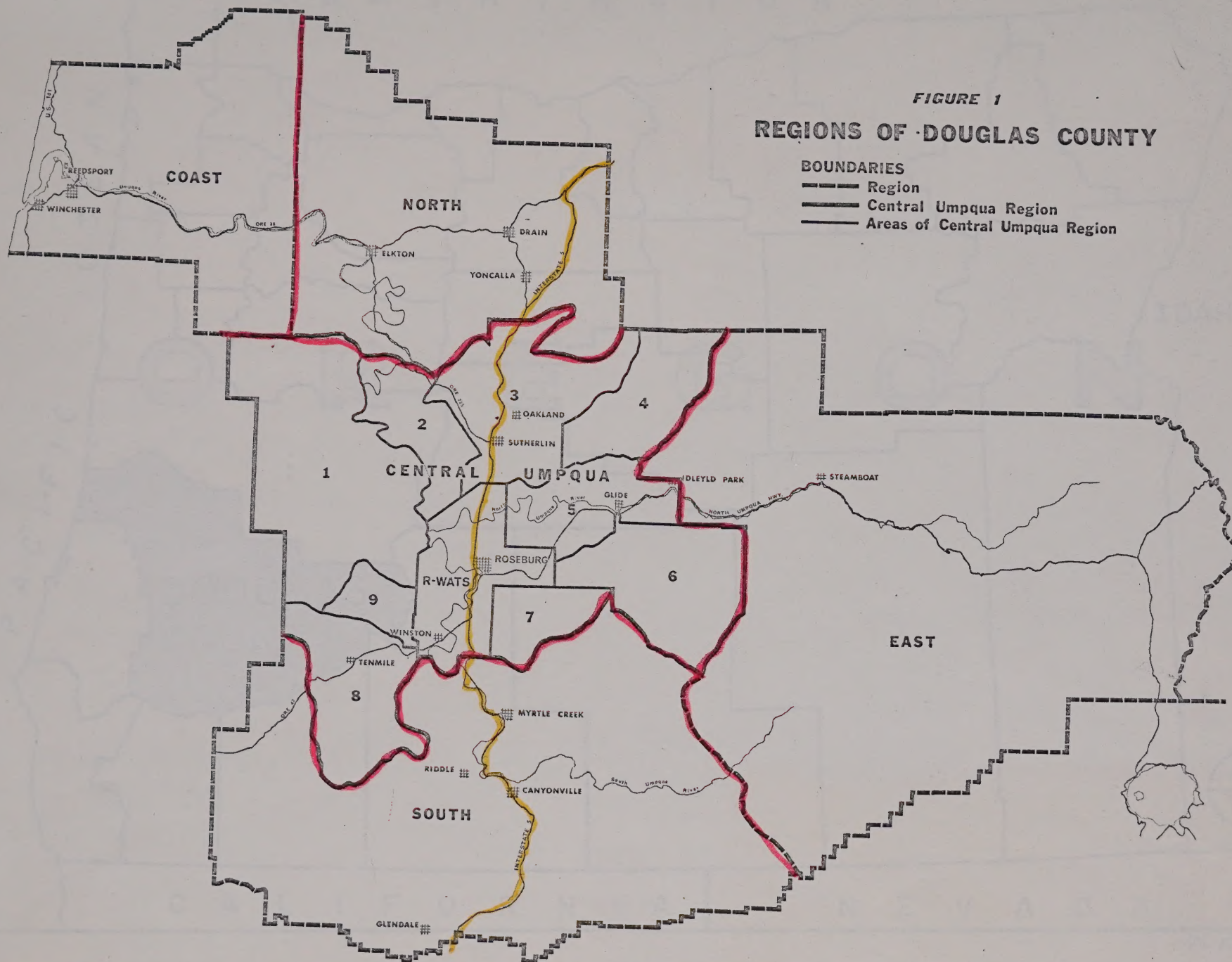
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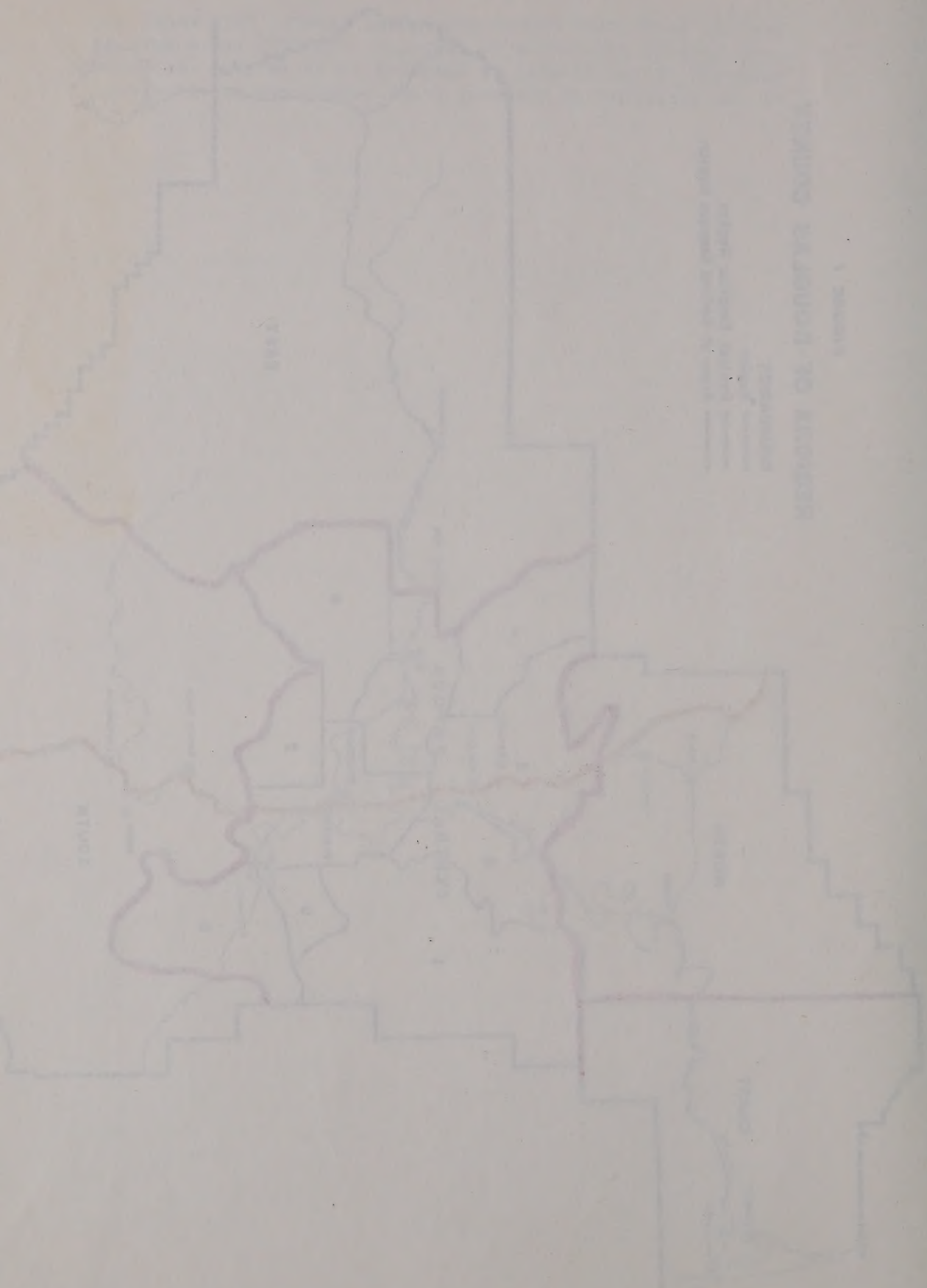
smaller individual timber processing plants, this would not have been as applicable an approach. In 1955 there were 85 sawmills in the County, as compared to 28 in 1965, according to the Directory of the West Coast Lumbermen's Association.



smaller individual timber processing plants, this would not have been as applicable an approach. In 1955 there were 85 sawmills in the County, as compared to 28 in 1957, according to the Directory of the West Coast Lumbermen Association.

FIGURE 1
REGIONS OF DOUGLAS COUNTY

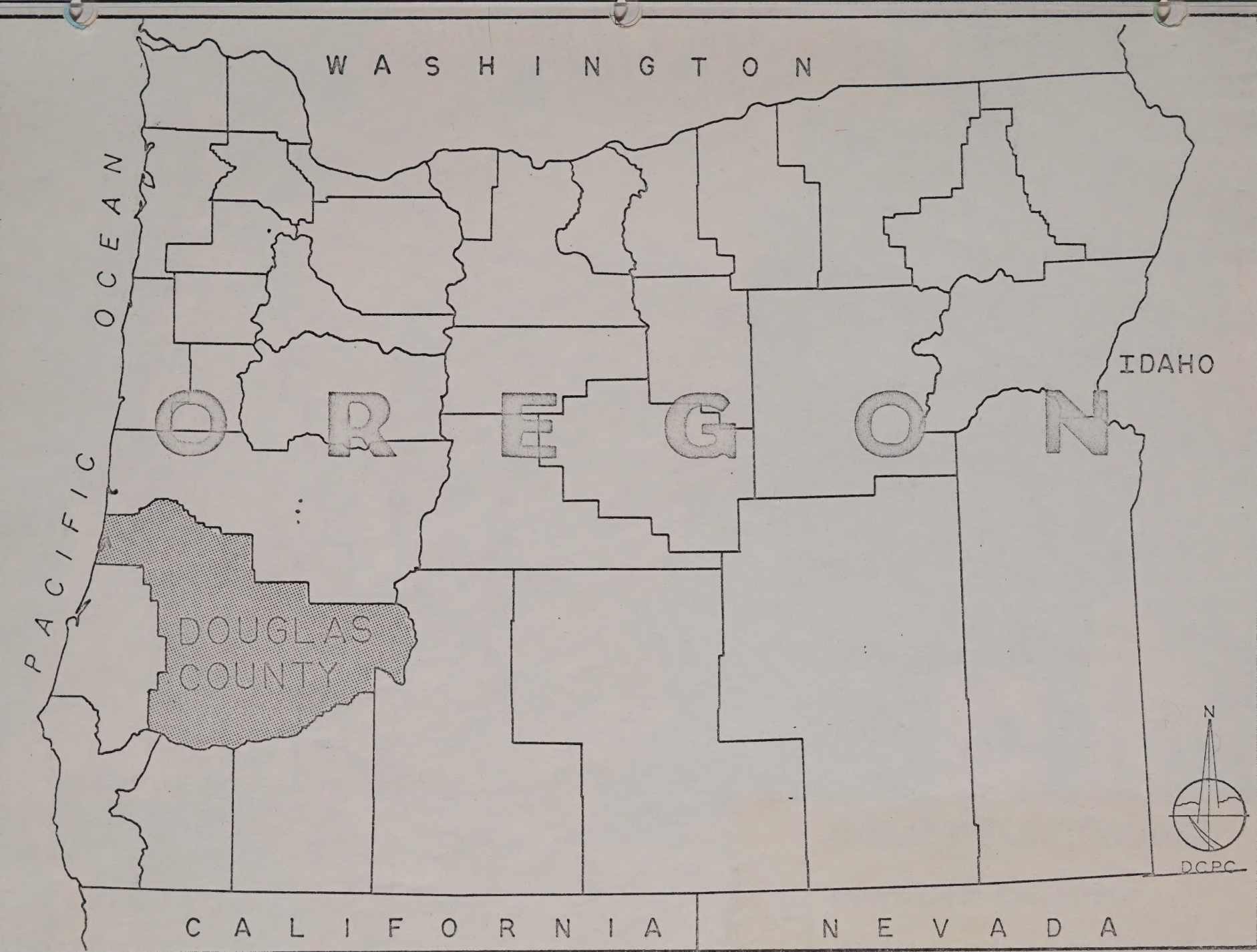


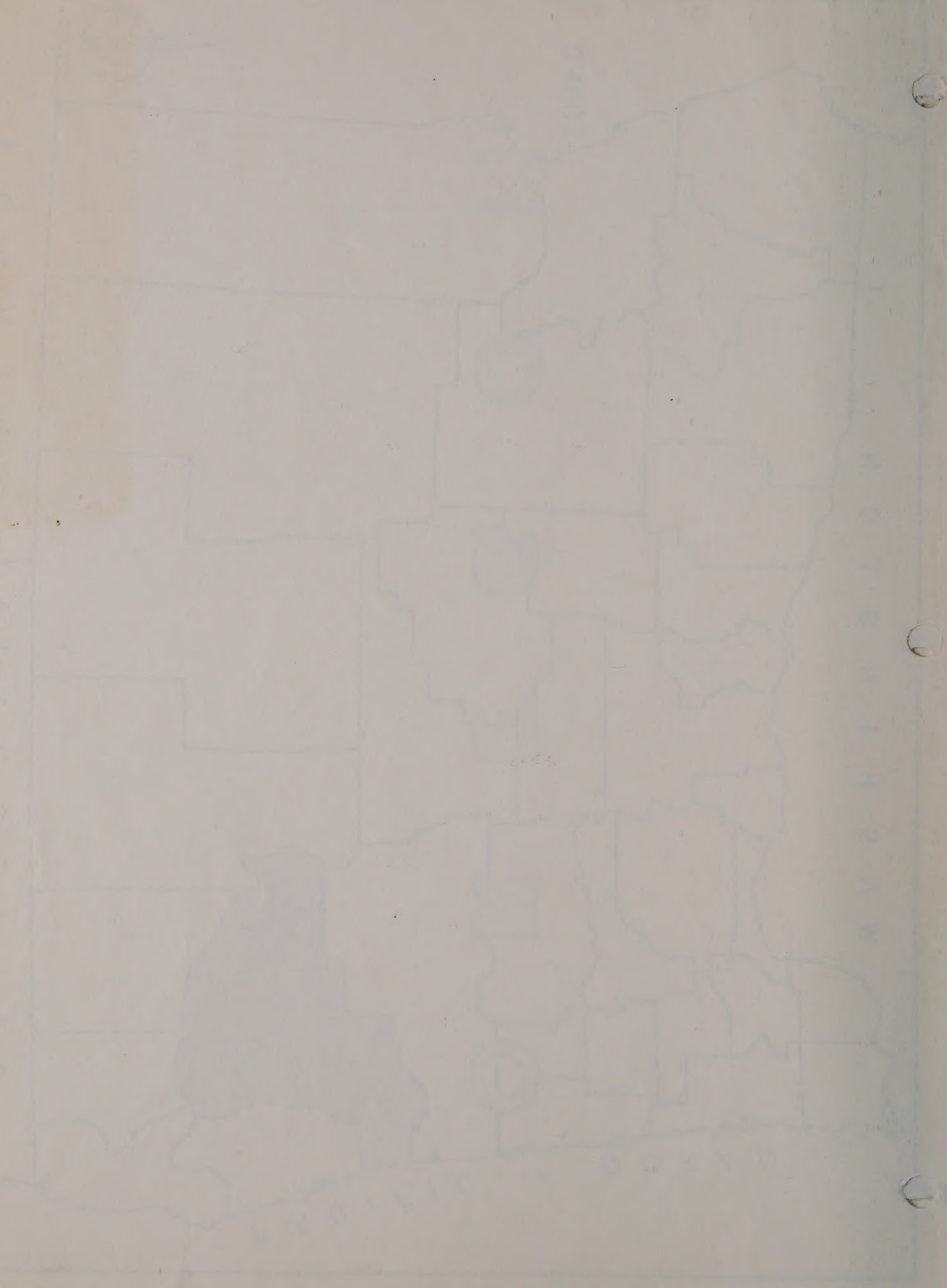


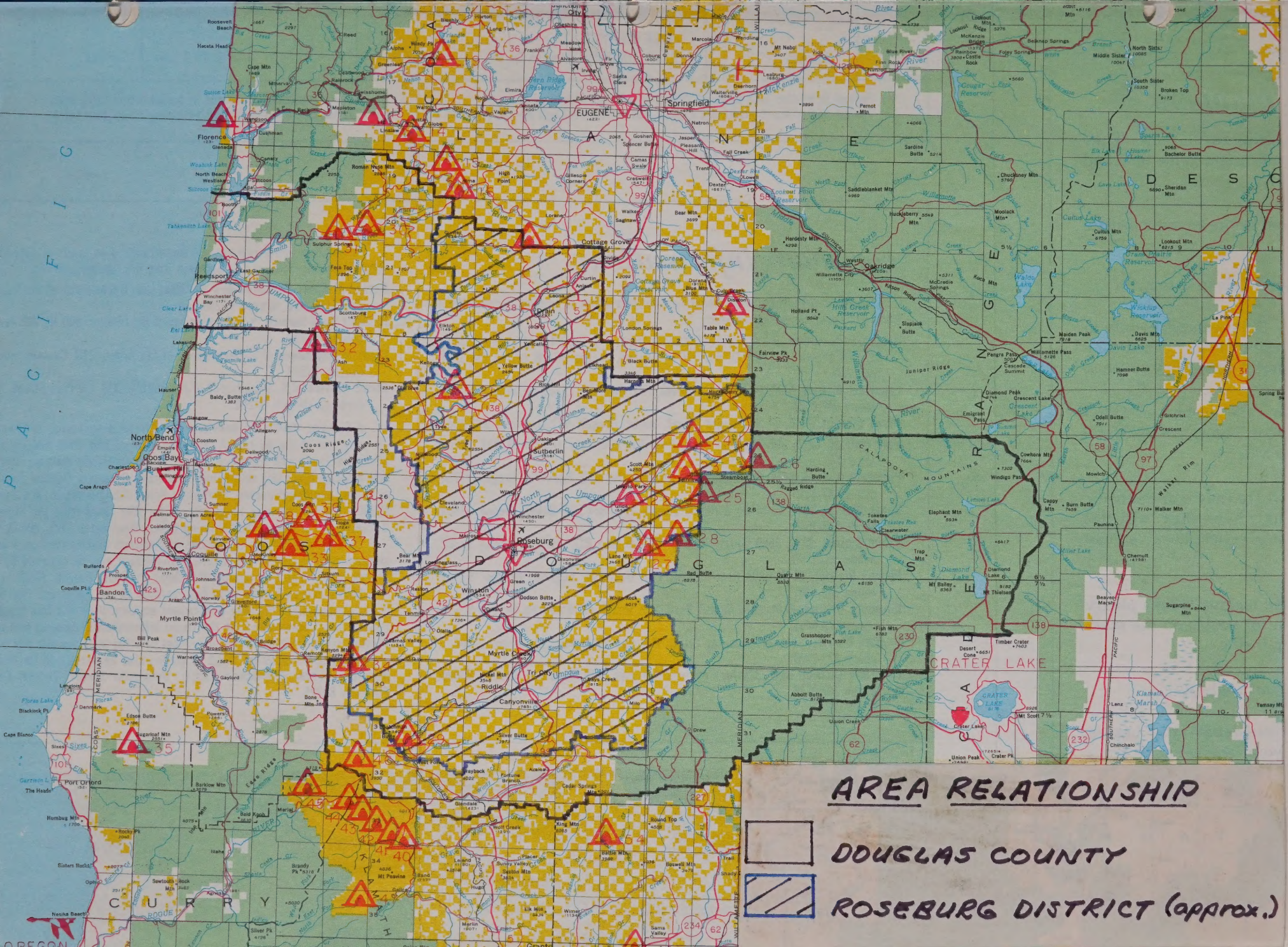
Legend:
— International boundary
— National boundary
— Major river
— Capital

REPUBLIC OF CONGO

Scale: 1:1,000,000







AREA RELATIONSHIP



DOUGLAS COUNTY

ROSEBURG DISTRICT (approx.)

manners

unting regulations. They
e fish and game now and

on before crossing private

ave a clean camp.

. Build campfires only in
can be extinguished com-
areful during dry weather.

private property. Don't
nces, signs, gates, water
ables.

where they will not cause
nd where they will not
st practice: keep vehicles

ive logging trucks plenty
h for people on the road.
g traffic.

rearm safety.

you depart the beaten
your whereabouts; bring
s, first aid kit, rations,
Avoid over-exertion.

nty of nature, earn the
generations for your good

59 T	*Beavertail Crooked River	10.3 mi. N Sherars bridge on BLM Deschutes Rd. 20 m. Prineville on Ore. 27, 3 mi. downstream Prineville Reservoir	40	20 T	Yes Yes	F,H F,H
61	Cow Lakes	VALE DISTRICT 31 mi. NW Jordan Valley on Co. Rd.		10 T	Yes	F,H
* Federal Recreation Area Entrance Permit or daily fee admits visitors. T Trailers and pickup campers are allowed, but service hook-ups are not provided.						
B Water is available, but should be boiled before being used. Sw Lifeguards are not present at swimming areas. Play safe!						

For more information:

If you want to know more about outdoor recreation in Oregon, contact these Bureau of Land Management offices:

Oregon State Office, Bureau of Land Management, U.S. Department of the Interior, 729 NE Oregon Street, P.O. Box 2965, Portland, Oregon 97208, phone 234-3361, ext. 290.

Lakeview District, BLM, 357 North L Street, P.O. Box 429, Lakeview, Oregon 97630, phone 947-2177

Burns District, BLM, 74 So. Alvord Street, Burns, Oregon 97720, phone 573-2071.

Vale District, BLM, 365 A Street West, P.O. Box 220, Vale, Oregon 97918, phone 473-3144.

Prineville District, BLM, 185 East 4th Street, P.O. Box 550, Prineville, Oregon 97754, phone 447-4115.

Baker District, BLM, Colorado & Resort Streets, P.O. Box 591, Baker, Oregon 97814, phone 523-3646.

Salem District, BLM, 3550 Liberty Road S. E., P.O. Box 3227, Salem, Oregon 97302, phone 585-1793.

Eugene District, BLM, 1255 Pearl Street, P.O. Box 392, Eugene, Oregon 97401, phone 342-5141.

Roseburg District, BLM, 1928 Airport Road, P.O. Box 1045, Roseburg, Oregon 97470, phone 672-4491.

Medford District, BLM, 310 West 6th Street, P.O. Box 1047, Medford, Oregon 97501, phone 779-2351.

Coos Bay District, BLM, 375 Park Avenue, P.O. Box 1139, Coos Bay, Oregon 97420, phone 267-3138.

Information about recreational opportunities on lands in Oregon other Federal agencies can be obtained from the following offices:

Bureau of Sport Fisheries and Wildlife, U.S. Department of the Interior, 3737, Portland, Oregon 97208.

National Park Service, U.S. Department of the Interior, 920 NE 7th Avenue, Oregon 97232.

Corps of Engineers, U.S. Department of the Army, 210 Custom House, Oregon 97209.

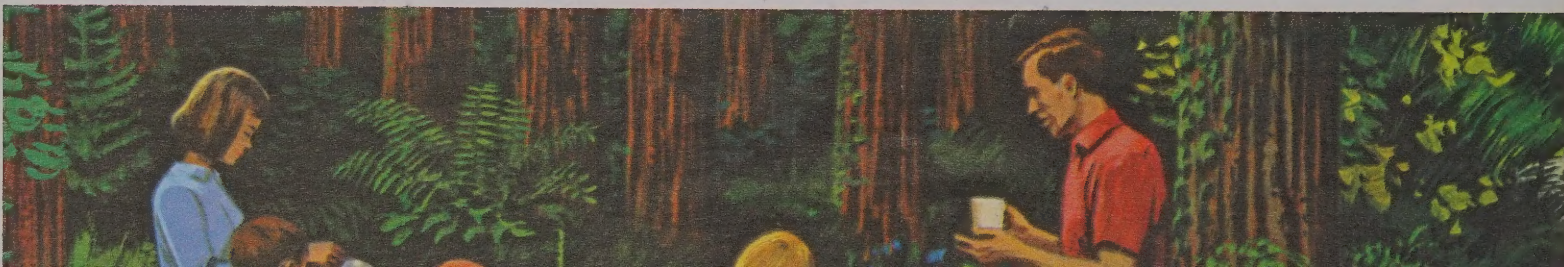
Forest Service, U.S. Department of Agriculture, 319 SW Pine Street, P.O. Portland, Oregon 97208.

A 68-page, illustrated booklet called "Natural Resources of Oregon" describes the programs of the Bureau of Land Management and other Federal agencies that administer lands with recreation values. It describes also the programs of other Federal agencies concerned with natural resources: Bureau of Outdoor Recreation, U.S. Department of the Interior, Bureau of Mines, Geological Survey, Bonneville Power Administration, and Bureau of Reclamation. The booklet may be purchased for fifty cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Hunting and fishing regulations and various publications on a wide variety of subjects relating to fish and wildlife management may be obtained by writing to the Oregon State Game Commission, P.O. 3503, Portland, Oregon 97208.

Nearly 200 parks and waysides operated by the Parks and Recreation Department of the Oregon State Highway Department are described in a free brochure called "Public Parks," obtainable from the Travel Information Division of that department, Oregon 97310. Principal recreation areas of other agencies are also listed.

Topographic maps for much of Oregon may be purchased for thirty cents from the Denver Distribution Center, Geological Survey, Federal Center, Colorado 80225.



01. N
Pr

Land Use and Ownership

1964

C. Land Ownership

Douglas County is the fifth largest Oregon county in area and seventh in population in 1968. The land area is 5,089 square miles or 3,240,320 acres. Tables of land ownership and land use follow this page. Over 50% of the county is in Federal ownership. The U. S. Forest Service has the largest Federal holding with 897,829 acres, and the BLM second with 748,261 acres. Total BLM lands in Douglas County are summarized as follows:

BLM Resource Management Responsibilities in Douglas County

	Roseburg District	Coos Bay District	Eugene District	Medford District
O&C	391,327.73	121,634.05	13,506	76,643.30
CBWR	13,957.43	635.94	-0-	-0-
PD	18,434.49	-0-	1,148	3,087.41
	423,719.65	131,048.83	14,654	79,730.71
Total Land Area				
Lane Co. (O&C)	280.00		Total BLM	- 649,153 acres
	423,999.65		Controverted O&C	- 99,108 acres
				748,261

Douglas County is 86.4 percent forested, which indicates a forested area of 2,799,636 acres. Considering that both BLM and USFS are entirely forested, totals indicate that the percentages are 27% and 32% respectively. Other forested lands total 2,799,636 acres, or 41%. The majority of this forested land is privately owned by timber companies.

Ownership and type of State and County lands can be found in the following tables.

The Coos Bay District reports 130,235 acres in their Economic Supplement. The above figure was obtained direct from them, the difference has not been resolved.

Land Use and Ownership

1964

	Oregon	Douglas County
Land Use	Percent	Percent
Urban	.49	.27
Industrial	.16	
Military	.10	
Intensive Agriculture	6.52	4.38
Dryland Farming	3.33	
Forests	44.84	<u>86.35</u>
Parks	.32	.02
Conservation	2.25	
Grazing	41.50	8.71
Non-productive Land	.49	
Total Land Area	100.00	100.00
Land Ownership	Acres	Acres
Total Land in Acres	61,641,600	3,239.680
Public Land Ownership in Acres		
Total	34,370,499	1,733,376
Federal	31,916,368	1,646,906
State	1,774,636	57,469
Local	679,500	29,001
Public Land Ownership as per-		
cent of Total Land Area		
Total	55.8%	53.5%
Federal	51.8	50.8
State	2.9	1.8
Local	1.1	0.9

Source: Oregon Department of Planning & Development; Resources for Development, March 1964, pages 65 & 66.

Land Use and Ownership 1984

DeKalb County

Percent

Land Use	Percent	Percent
Urban	48	37
Industrial	18	
Highway	10	
Intensive Agriculture	6.33	4.33
Dryland Farming	3.33	
Forests	28.84	28.33
Parks	33	1.33
Conservation	3.33	
Grassland	21.50	8.71
Non-productive land	.48	
Total Land Area	100.00	100.00

Land Ownership	Acres	Acres
Total Land in Acres	61,841,800	3,338,680
Public Land Ownership in Acres		
Total	34,370,489	1,733,378
Federal	31,918,388	1,646,808
State	1,774,839	27,989
Local	679,800	39,001
Public Land Ownership as per- cent of Total Land Area		
Total	55.6%	27.33
Federal	51.8	20.8
State	2.8	1.8
Local	1.1	0.9

Source: Oregon Department of Planning & Development; Resources
for Development, March 1984, pages 62 & 63.

Federal Land Ownership by Agency

1962

Agency	State Totals Acres	Douglas County Acres
Bureau of Land Management	15,937,354	748,261
U. S. Forest Service	15,001,833	897,829
Fish and Wildlife Service	444,024	
Bureau of Reclamation	173,447	
National Park Service	160,877	
Navy	98,646	
Corps of Engineers	59,473	360
Army	19,362	36
Agricultural Research Service	14,594	
Bonneville Power Administration	1,511	21
Bureau of Indian Affairs	1,219	
Federal Aviation Agency	971	52
Maritime Administration	917	
Air Force	802	
Coast Guard	686	89
Veterans Administration	474	256
Federal Communications Commission	109	
Bureau of Mines	47	
Post Office Department	15	
General Services Administration	7	
Public Health Service	1	
Total - Federal Lands	31,916,368	1,646,905
Percent - Federal Ownership	51.8%	50.8%

Source: Carolan, W. B., Jr., Federal Land in Oregon. Oregon State University, 1963.

Federal Land Ownership by Agency

1963

Agency	State Lands Acres	Douglas County Acres
Bureau of Land Management	12,937,350	745,361
U. S. Forest Service	12,001,413	897,822
Fish and Wildlife Service	440,020	
Bureau of Reclamation	173,987	
National Park Service	180,977	
Navy	98,640	
Corps of Engineers	80,473	300
Army	12,303	38
Agricultural Research Service	10,880	
Bonneville Power Administration	1,211	21
Bureau of Indian Affairs	1,219	21
Federal Aviation Agency	971	
Maritime Administration	917	
Air Force	807	
Coast Guard	885	88
Veterans Administration	874	228
Federal Communications Commission	109	
Bureau of Mines	47	
Post Office Department	15	
General Services Administration	7	
Public Health Service	1	
Total - Federal Lands	31,916,368	1,466,905
Percent - Federal Ownership	21.8%	60.8%

Sources: Catalog, U. S. G. S., Federal Land in Oregon.
State University, 1963.

State Land Ownership By Agency

1962

Agency	State Totals Acres	Douglas County Acres
Land Board	809,933	34,040
Board of Forestry	653,190	8,990
Highway Commission	221,644	13,730
Game Commission	58,123	708
Higher Education	17,762	
Board of Control	6,615	
State Engineer	4,330	
Military Department	1,504	
Board of Aeronautics	860	
Fish Commission	472	
Fair Commission	181	
Liquor Commission	15	
Public Employees Retirement Board	4	
Department of Employment	2	
Finance and Administration	2	
Total - State Lands	1,774,637	57,469
Percent - State Ownership	2.9%	1.7%

Source: Oregon State Department of Finance and Administration

LAND AREA IN HIGHWAYS, STREETS AND ROADS

Ownership	State Totals Acres	Douglas County Acres
State Highways	127,500	9,120
County Roads	227,520	9,765
City Streets	24,400	810
Total	379,420	19,695

Source: Oregon State Tax Commission & Oregon State Highway Dept.

ROSEBURG DISTRICT ACREAGE SUMMARY

12-31-69

<u>UNIT</u>	<u>COUNTY</u>	<u>O&C 1/</u>	<u>PD 2/</u>	<u>CBWR 1/</u>	<u>TOTAL</u>
North Umpqua	Douglas	91,107.04	2,836.54	0	93,943.58
Drain	Douglas	121,125.62	6,193.92	80.00	127,399.54
Drain	Lane	280.00	0	0	280.00
	Both	121,405.62	6,193.92	80.00	127,679.54
Dillard	Douglas	73,415.39	4,514.85	13,877.43	91,807.67
Total Douglas	Douglas	285,648.05	13,545.31	13,957.43	313,150.79
(M.U.)	Lane	280.00	0	0	280.00
	Both	285,928.05	13,545.31	13,957.43	313,430.79
South Umpqua	Douglas	105,679.68	4,889.18	0	110,568.86
Total District	Douglas	391,327.73	18,434.49	13,957.43	423,719.65
" "	Lane	280.00	0	0	280.00
	Both	391,607.73	18,434.49	13,957.43	423,999.65

1/ Acres from 1965 inventory, updated to 12-69. (add or subtract exchanges, sales, etc.)

2/ Based on land tenure analysis of all P.D. lands for classification purposes 12-69

OLM Library
 Denver Federal Center
 Box 85, DC-521
 P.O. Box 25047
 Denver, CO 80225

**BLM Library
Denver Federal Center
Bldg. 85, OC-521
P.O. Box 25047
Denver, CO 80225**

BLM Field
Denver Federal Center
Box 2500
Denver, CO 80225

DISTRICT ECONOMIC SUPPLEMENT

A. Population

1. Numbers - The official 1970 population census figures have recently been released. The total Douglas County population was placed at 71,743, a 4.8 percent increase over the 1960 figure of 68,458. A prediction made in 1966 by the State Board of Census anticipated a population of 85,198 persons in Douglas County by 1980, an increase of 23% from 1960. Estimates of population growth based on advance 1970 census data, anticipated Douglas County population would be 73,870, or an 8% increase. Both of these estimates appear to be too high. *reference*

In a publication, "The Annals of Regional Science" by Schallan, Maki, & Beuter, June 1969, relates present and future population of the Roseburg area to timber production during the period 1960-1980. If timber production increased by 20%, population could increase 3100, but population will decrease 4400 persons if current log production level is maintained.

(Miller Division)	1,433	1,049	+36.6
Yoncalla	675	599	+12.7
Canyonville	940	1,081	-13.7
Clatskanie	701	743	-5.7
	45,566		

Rural Population: 71,743 - 45,566 = 26,177 or 36.5%

DISTRICT ECONOMIC SUPPLEMENT

A. Population

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Census Figures for Cities and Areas of Douglas County

	<u>1970</u>	<u>1960</u>	<u>% Change</u>
Roseburg	14,461	11,467	+26.1
Roseburg (rural)	9,047	none available	
Oakland	1,010	856	+17.9
Sutherlin	3,070	2,452	+25.2
Elkton	176	146	+20.5
Drain	1,204	1,052	+14.4
Winston	2,468	2,395	
Riddle	1,042	992	
Myrtle Creek	2,733	2,231	+22.5
Reedsport	4,039	2,998	+34.7
(Tenmile Division)	2,559	2,332	+ 9.7
(Wilbur Division)	1,433	1,049	+36.6
Yoncalla	675	698	- 3.3
Canyonville	940	1,089	-13.7
Glendale	<u>709</u>	748	
	45,566		

Rural Population: $71,743 - 45,566 = 26,177$ or 36.5%

Incorporated Area - 32,485
 Unincorporated Area - 39,258

2. Rural-Urban Distribution (from previous table) - There are other small towns within the county, but for the purposes of this report, 36% of the county population is considered to be the rural segment.

In 1966, 70% of the population, numbering 51,000 persons, were living outside of places with populations greater than 2500. Towns with as few as 100 population are now incorporating, and with the emphasis on adequate zoning, the resident rural population may not be as meaningful. The population density of the county is about 15 persons per square mile. With the north-south axis roughly following Interstate 5 and considered to be six or seven miles wide, the land area is about 20% of the region with 85% of the population.

3. Attributes and Characteristics - The main descriptive characteristics of the Central Umpqua region (average household size, age-sex distribution, etc.), are not known. However, evidence does suggest that persons per occupied dwelling declined from 3.24 in 1960 to 3.19 in 1968. The number of births per 1,000 women ages 15-44 declined from 118 in the period 1960-1965, to about 105 in the period 1966-1969, and the decline may be greater than this. There is, however, a marked increase in number of women, ages 20-24 years.

The educational level of the county population is higher than the national average. In 1960, 42.3 percent of the population over 25 years old had completed high school. Only 2.5 percent had completed less than 5 years of schooling. The median schooling for the 25 and over age class was 11.0 years.

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3. Attributes and Characteristics - The main descriptive characteristics of the Central Valley region (average household size, age-sex distribution, etc.), are not known. However, evidence does suggest that persons per occupied dwelling declined from 3.24 in 1960 to 3.19 in 1968. The number of births per 1,000 women ages 15-44 declined from 118 in the period 1950-1965, to about 105 in the period 1966-1969, and the decline may be greater than this. There is, however, a marked increase in number of women, ages 20-24 years.

The educational level of the county population is higher than the national average. In 1960, 42.3 percent of the population over 25 years old had completed high school. Only 2.5 percent had completed less than 5 years of schooling. The median schooling for the 25 and over age class was 11.0 years.

4. Migration - The 35% increase between 1960 and 1970 in the Reedsport and coastal region of the county is probably mainly influenced by International Paper Co. establishing in the area. Salmon Harbor is the major project of the County Park Department, and the sports fishery and recreation segment undoubtedly contributes to the increase, but in the next decade the rate of population increase is expected to decline. The Central Umpqua region has almost two-thirds of the county population, and including the South County Region, the total is 60,000 population, or 83% of the total.

Census Figures Released

Douglas County's official census was placed at 71,743, a 4.8 per cent increase over the 1960 figure of 68,458.

Cong. John Dellenback's office reported the official 1970 population figures this morning. The total county figure was given along with official population figures for 16 local areas in the county.

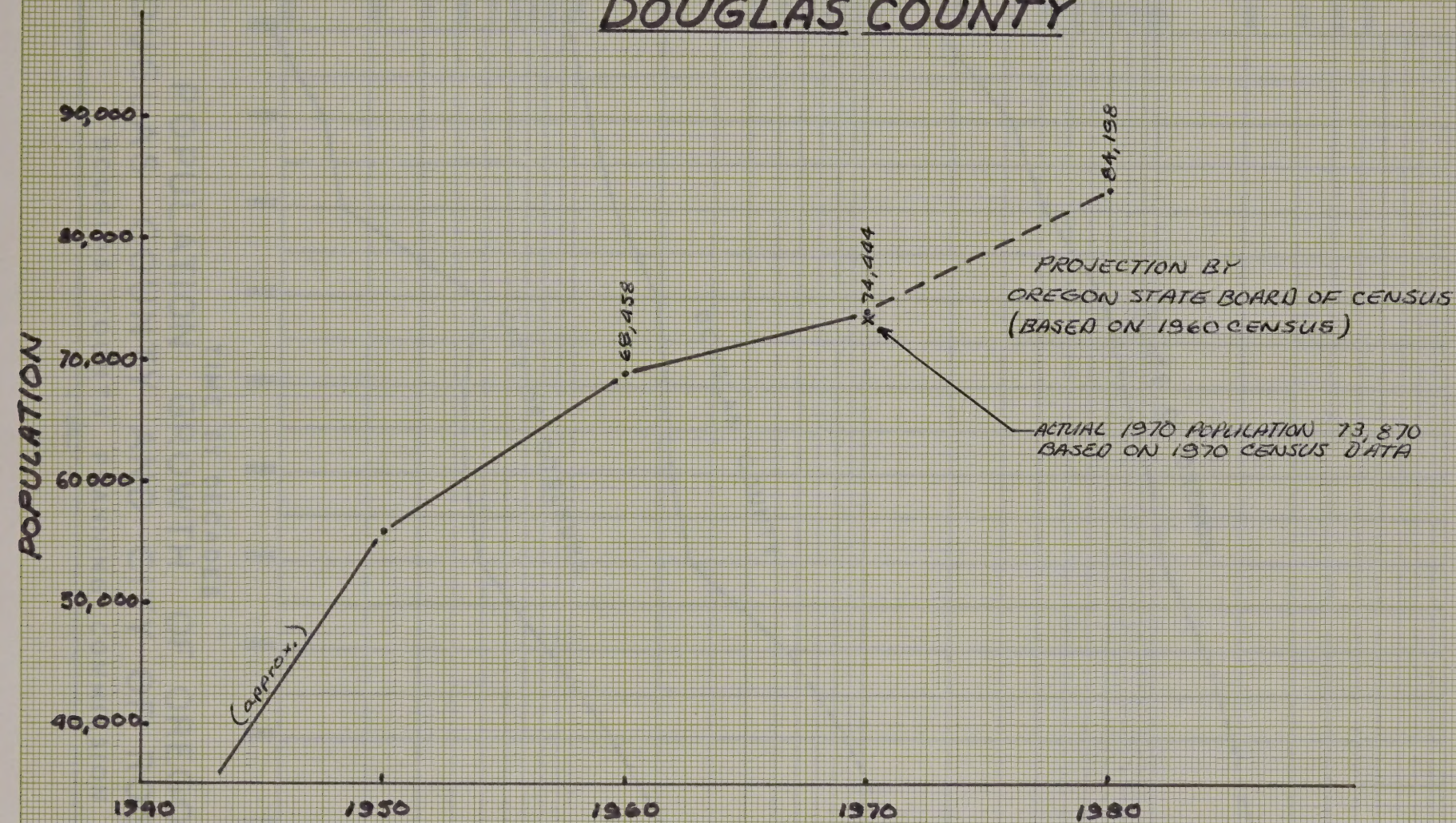
Of the 16 local areas reported, only three showed population declines since the 1960 official census.

The three showing decreases in population included Yoncalla, Canyonville and Glendale. Yoncalla's new figure was set at 675, compared with 698 in 1960. Canyonville dropped from 1,089 to 940 while Glendale's decline was from 748 to 709.

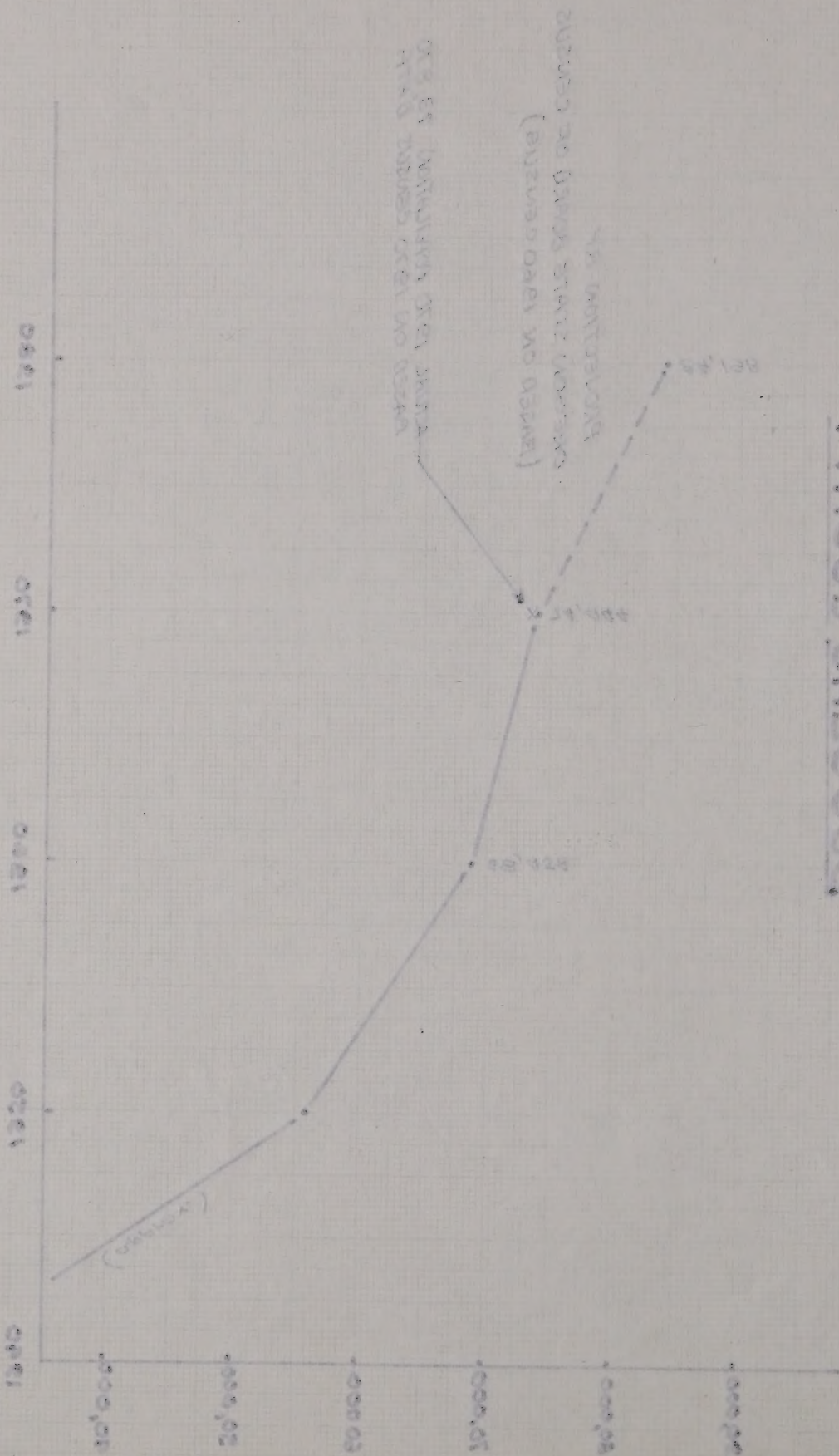
Census figures for the other cities and areas, with the 1970 figure followed by the 1960 figure, are:

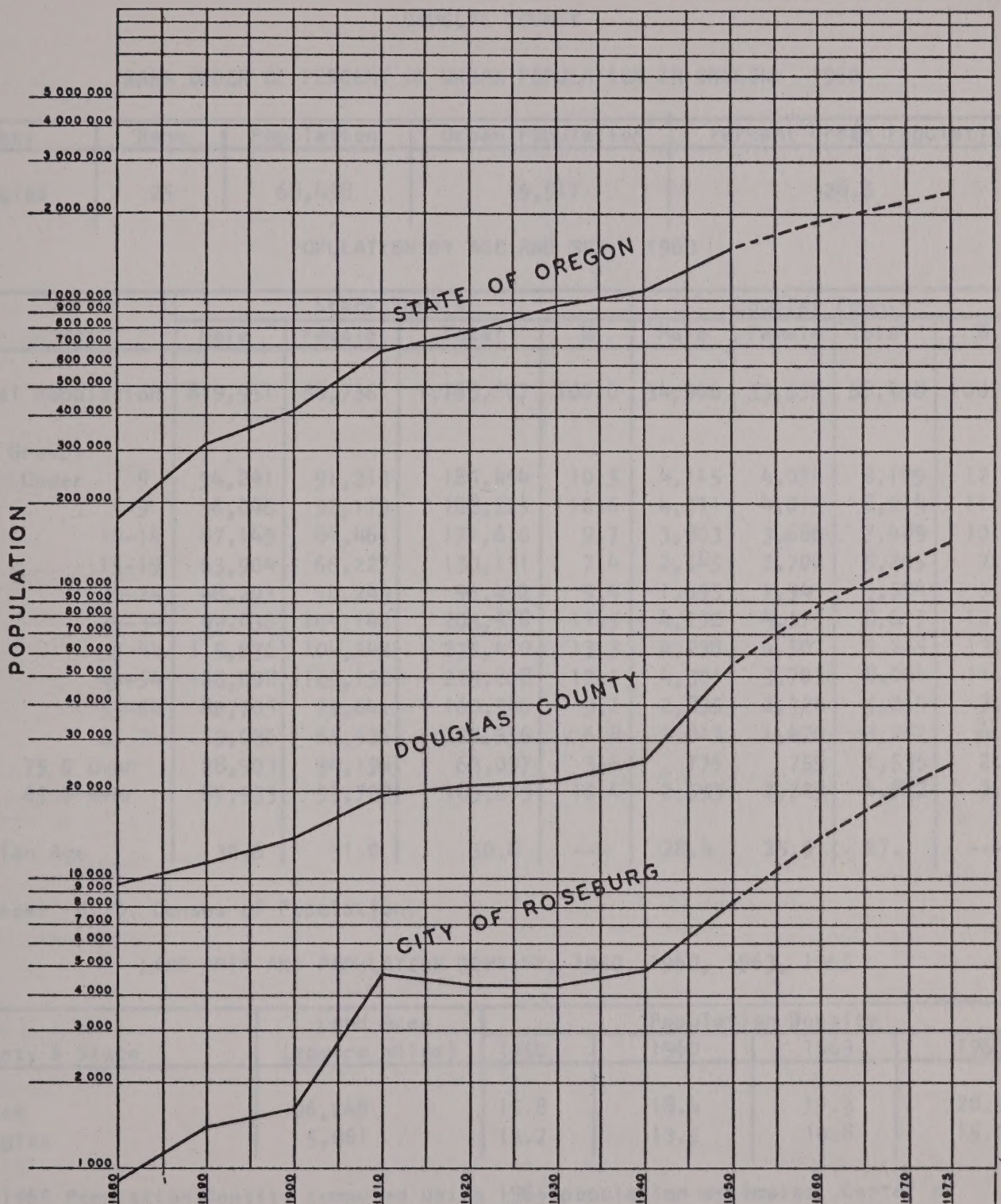
Roseburg — 14,461, 11,467
Roseburg rural — 9,047 (no 1960 figure available)
Oakland — 1,010, 856
Sutherlin — 3,070, 2,452
Elkton — 176, 146
Drain — 1,204, 1,052
Winston — 2,468, 2,395
Riddle — 1,042, 992
Myrtle Creek — 2,733, 2,231
Reedsport — 4,039, 2,998
Tenmile Division — 2,559, 2,332
Wilbur Division — 1,433, 1,049

POPULATION TREND DOUGLAS COUNTY

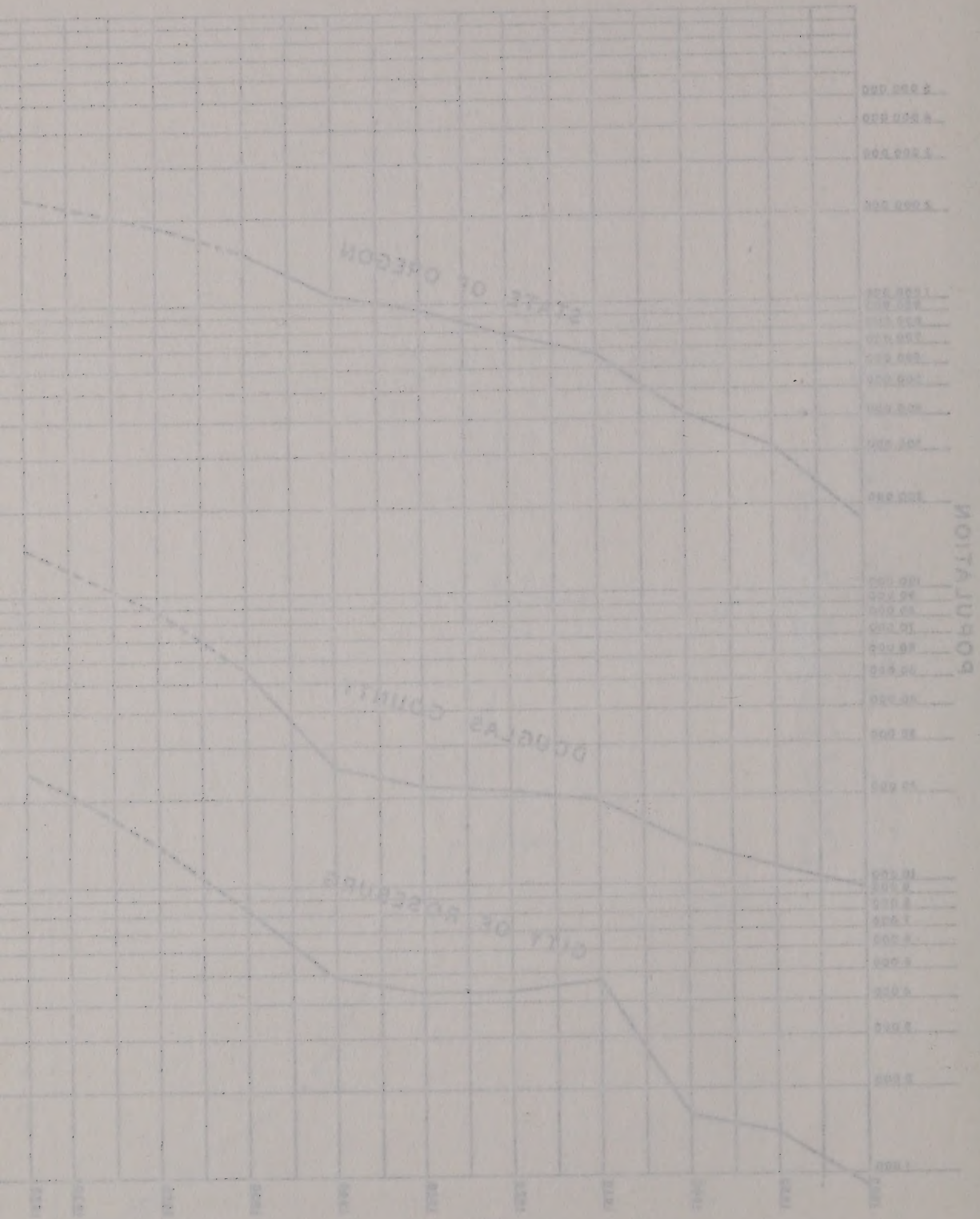


QWERTZ NOTTALJUCQOQ YTIWUCOZ ZALJUCOQ





TIME BY DECADES
**POPULATION GROWTH OF OREGON
 DOUGLAS COUNTY AND CITY OF ROSEBURG**
 DOUGLAS COUNTY PLANNING COMMISSION



DOUGLAS COUNTY PLANNING COMMISSION
 POPULATION GROWTH OF OREGON
 TIME BY DECADES
 DOUGLAS COUNTY AND CITY OF ROSEBURG

DOUGLAS COUNTY

RANK ORDER OF PERCENT OF URBAN POPULATION IN OREGON: 1960

County	Rank	Population	Urban Population	Percent Urban Population
Douglas	25	68,458	19,511	28.5

POPULATION BY AGE AND SEX: 1960

	State Totals				Douglas County			
	Male	Female	Total	%	Male	Female	Total	%
Total Population	879,951	88,736	1,768,687	100.0	34,906	33,552	68,458	100.0
Age Groups--								
Under 5	94,241	91,213	185,454	10.5	4,115	4,074	8,189	12.0
5-9	96,046	92,179	188,225	10.6	4,011	4,013	8,024	11.7
10-14	87,149	84,461	171,610	9.7	3,803	3,686	7,489	10.9
15-19	63,904	66,227	130,131	7.4	2,545	2,700	5,245	7.7
20-24	46,203	50,249	96,452	5.4	1,653	1,941	3,594	5.3
25-34	99,436	104,142	203,578	11.5	4,252	4,375	8,627	12.6
35-44	115,636	104,142	235,410	13.3	4,738	4,507	9,245	13.5
45-54	108,698	105,130	213,828	12.1	4,301	3,703	8,004	11.7
55-64	80,705	79,641	160,346	9.1	2,895	2,324	5,219	7.6
65-74	59,030	61,526	120,556	6.8	1,817	1,470	3,287	4.8
75 & Over	28,903	34,194	63,097	3.6	776	759	1,535	2.2
65 & Over	87,933	95,720	183,653	10.4	2,593	2,229	4,822	7.0
Median Age	30.6	31.0	30.8	---	28.4	25.9	27.1	---

Source: U. S. Census of Population.

LAND AREA AND POPULATION DENSITY, 1950, 1960, 1963, 1965

County & State	Land Area (square miles)	Population Density			
		1950	1960	1963	1965*
State	96,248	15.8	18.4	19.3	20.5
Douglas	5,061	13.2	13.5	10.8	15.0

* 1965 Population Density computed using 1965 population estimates, Center of Population Research & Census, PSC; U. S. Census of Population.

DOUGLAS COUNTY

POPULATION GROWTH

		State Total	Douglas County
Population	1950	1,521,341	54,549
	1960	1,768,687	68,458
	1963	1,856,190	66,904
	1965*	1,972,150	76,000
Percent Change		Percent	Percent
	1950-1960	16.3	25.5
	1960-1963	4.9	-2.3
	1963-1965*	11.5	11.0
Rank in State			Rank
	1950		7
	1960		7
	1964**		7

* Certificate of Population Enumerations & Estimates, July 1965, Center for Population Research & Census, PSC. ** U. S. Census of Population.
Source: U. S. Census of Population.

COMPONENTS OF CHANGE IN POPULATION IN OREGON, BY COUNTIES

State or County	1950 - 1960			1940 - 1950		
	Net Change	Natural Increase	Net Migration	Net Change	Natural Increase	Net Migration
State	247,346	228,412	18,934	431,657	142,143	289,514
Douglas County	13,909	12,778	1,131	28,821	3,964	24,857

URBAN AND RURAL POPULATION

Year	State Total		Douglas Co.	
	Urban	Rural	Urban	Rural
1950	819,318	702,023	8,390	46,159
1960	1,100,122	668,565	19,541	48,917
Percent Change 1950-60	34.3	-4.8	132.9	6.0

Source: U. S. Census of Population.

DOUGLAS COUNTY

POPULATION GROWTH

Year	State Total		Douglas Co.
	Population	Percent Change	Rank in State
1950	1,521,341	16.3	7
1960	1,768,687	16.3	7
1963	1,856,190	4.9	7
1965*	1,972,120	17.5	7
1950-1960			
1960-1963			
1963-1965*			
Percent Change			
Rank in State			
1950			
1960			
1965*			

* Certificate of Population Enumerations & Estimates, July 1965, Center for Population Research & Census, PSC. ** U. S. Census of Population.
Source: U. S. Census of Population.

COMPONENTS OF CHANGE IN POPULATION IN OREGON, BY COUNTIES

State or County	1950 - 1960		1960 - 1970	
	Net Change	Net Increase	Net Change	Net Increase
State	247,345	328,412	431,627	142,143
Douglas County	13,203	12,778	38,821	3,964

URBAN AND RURAL POPULATION

Year	State Total		Douglas Co.
	Urban	Rural	Urban
1950	819,716	702,023	8,390
1960	1,106,132	668,862	19,241
Percent Change 1950-60	34.3	-4.8	132.9

Source: U. S. Census of Population.

TABLE 3

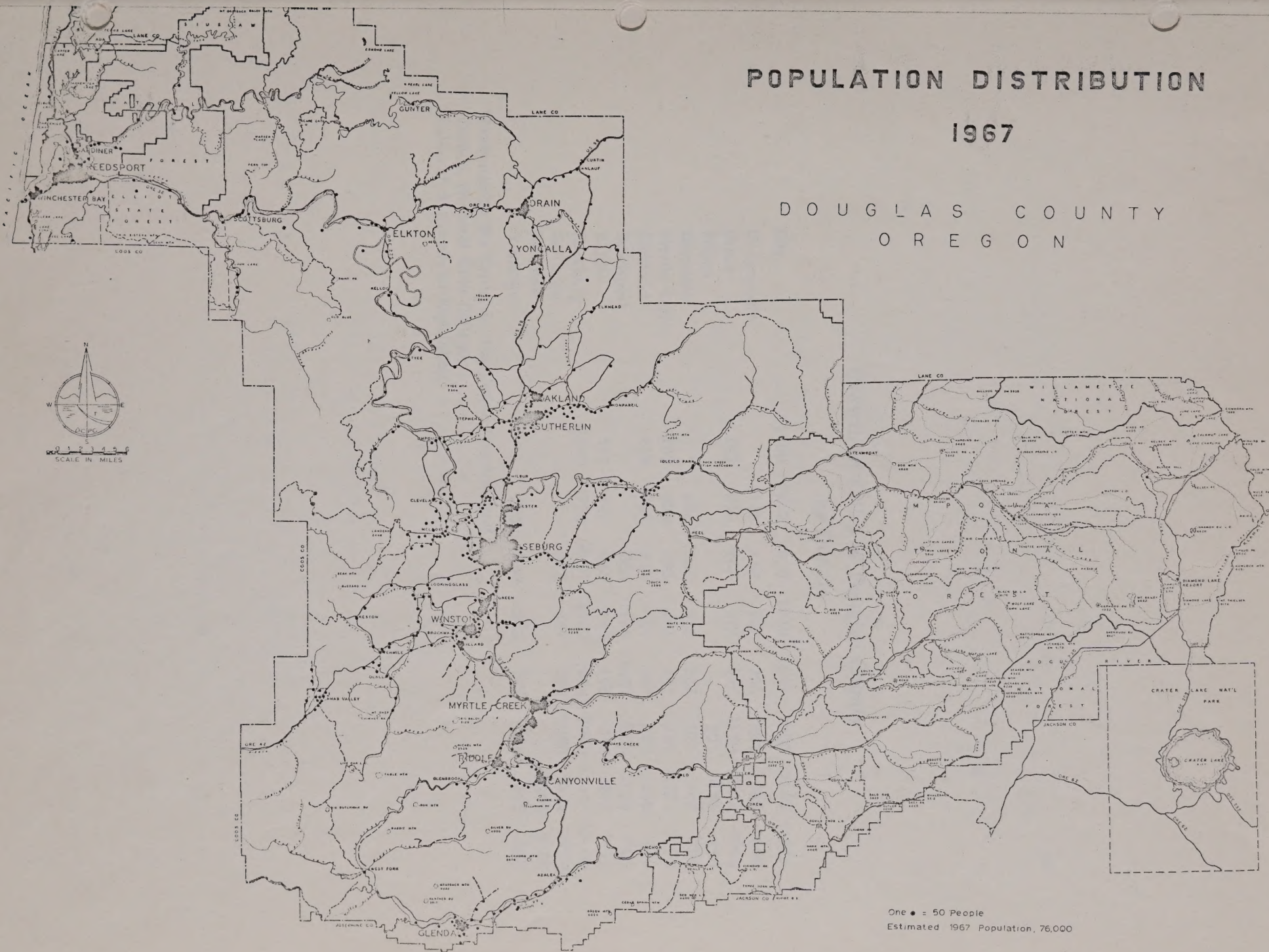
ESTIMATED AND PROJECTED POPULATION, WITH AND WITHOUT 20-
PERCENT INCREASE IN TIMBER PRODUCTION, BY ECONOMIC AREAS
OF DOUGLAS-FIR REGION

Area	Estimated 1960	Projected without increase	Total change, 1960-1980	Projected with 20% increase	Total change 1960-1980
-----1,000 persons-----					
Seattle	1,126.9	2,118.5	991.6	2,141.3	1,014.4
Bellingham	124.5	155.7	31.2	165.2	40.7
Port Angeles	39.7	48.0	8.3	55.5	15.8
Tacoma	518.9	578.6	59.7	626.8	107.9
Aberdeen	69.1	84.9	15.8	97.8	28.7
Portland	895.4	1,320.6	425.2	1,363.2	472.8
Long view					
Kelso	61.2	73.4	12.2	86.0	24.8
Astoria	46.3	28.0	-18.3	31.5	-14.8
Salem	147.4	208.3	60.9	218.0	70.6
Corvallis	122.7	130.7	8.0	146.0	23.3
Eugene	162.9	172.7	9.8	190.5	27.6
<u>Roseburg</u>	68.5	64.1	-4.4	71.6	3.1
Coos Bay-					
North Bend	68.9	42.3	-26.6	49.7	-19.2
Medford	103.9	93.1	-10.8	103.1	-.8
Eureka	155.5	142.3	-13.2	158.9	3.4
Total	3,711.8	5,261.2	1,549.4	5,505.1	1,793.3

SOURCE: Con Schallau, Wilbur Maki, John Becker,
"THE ANNALS OF REGIONAL SCIENCE", June 1969

1967

D O U G L A S C O U N T Y
O R E G O N



One ● = 50 People
Estimated 1967 Population, 76,000

DISTRIBUTION OF POPULATION BY AGE GROUPS FOR 1966

PERCENTAGE OF TOTAL POPULATION

AGE GROUP

1 2 3 4 5

0 - 5 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

6 - 11 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

12 - 17 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

18 - 24 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

25 - 34 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

35 - 44 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

45 - 54 YEARS

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

55 AND OVER

COUNTY

U.S.

XXXXXXXXXX

XXXXXXXXXX

Growth of Cities of Douglas County

by Decade

City	1900	1910	1920	1930	1940	1950	1960	*1966
Canyonville		149	156	167	255	861	1089	1000
Drain	193	335	607	497	597	1150	1052	1000
Elkton						201	146	150
Glendale		646	548	516	557	871	748	780
Myrtle Creek	189	429	385	401	441	1781	2231	2770
Oakland	368	467	516	421	367	829	856	850
Reedsport			850	1178	1421	2288	2998	4200
Riddle	131	187	268	195	195	214	992	1110
Roseburg	1690	4738	4381	4362	4924	8390	11467	15000
Sutherlin			515	457	525	2230	2452	2780
Winston							2395	2500
Yoncalla		233	232	252	277	626	698	650

*Estimates by the Center for Population Research and
Census, Portland State College.

Source: U. S. Census of Population.

1 2 3 4 5

5 6 7 8 9 10

Douglas County

DISTRIBUTION OF POPULATION BY AGE GROUPS FOR 1966

AGE GROUP	PERCENTAGE OF TOTAL POPULATION									
	1	1	2	2	3	3	4	4	5	
	5.....0.....5.....0.....5.....0.....5.....0.....5.....0									
0 - 5 YEARS										
COUNTY	IIIIIIIIIIIIII									
U.S.	XXXXXXXXXX									
6 - 11 YEARS										
COUNTY	IIIIIIIIIIIIII									
U.S.	XXXXXXXXXXXXXXXXXX									
12 - 17 YEARS										
COUNTY	IIIIIIIIIIIIII									
U.S.	XXXXXXXXXXXXXXXXXX									
18 - 24 YEARS										
COUNTY	IIIIIIIIIIIIII									
U.S.	XXXXXXXXXX									
25 - 34 YEARS										
COUNTY	IIIIIIIIIIIIII									
U.S.	XXXXXXXXXX									
35 - 49 YEARS										
COUNTY	IIIIIIIIIIIIIIIIIIIIII									
U.S.	XXXXXXXXXXXXXXXXXXXXXX									
50 - 64 YEARS										
COUNTY	IIIIIIIIIIIIIIII									
U.S.	XXXXXXXXXXXXXXXXXXXXXX									
65 AND OVER										
COUNTY	IIIIIIIIII									
U.S.	XXXXXXXXXX									
	1	1	2	2	3	3	4	4	5	
	5.....0.....5.....0.....5.....0.....5.....0.....5.....0									

SOURCE - OFFICE OF ECONOMIC OPPORTUNITY

DOUGLAS COUNTY

RANK ORDER OF PERCENT OF URBAN POPULATION IN OREGON: 1960

County	Rank	Population	Urban Population	Percent Urban Population
Douglas	25	68,458	19,511	28.5

POPULATION BY AGE AND SEX: 1960

	State Totals				Douglas County			
	Male	Female	Total	%	Male	Female	Total	%
Total Population	879,951	88,736	1,768,687	100.0	34,906	33,552	68,458	100.0
Age Groups--								
Under 5	94,241	91,213	185,454	10.5	4,115	4,074	8,189	12.0
5-9	96,046	92,179	188,225	10.6	4,011	4,013	8,024	11.7
10-14	87,149	84,461	171,610	9.7	3,803	3,686	7,489	10.9
15-19	63,904	66,227	130,131	7.4	2,545	2,700	5,245	7.7
20-24	46,203	50,249	96,452	5.4	1,653	1,941	3,594	5.3
25-34	99,436	104,142	203,578	11.5	4,252	4,375	8,627	12.6
35-44	115,636	104,142	235,410	13.3	4,738	4,507	9,245	13.5
45-54	108,698	105,130	213,828	12.1	4,301	3,703	8,004	11.7
55-64	80,705	79,641	160,346	9.1	2,895	2,324	5,219	7.6
65-74	59,030	61,526	120,556	6.8	1,817	1,470	3,287	4.8
75 & Over	28,903	34,194	63,097	3.6	776	759	1,535	2.2
65 & Over	87,933	95,720	183,653	10.4	2,593	2,229	4,822	7.0
Median Age	30.6	31.0	30.8	---	28.4	25.9	27.1	---

Source: U. S. Census of Population.

LAND AREA AND POPULATION DENSITY, 1950, 1960, 1963, 1965

County & State	Land Area (square miles)	Population Density			
		1950	1960	1963	1965*
State	96,248	15.8	18.4	19.3	20.5
Douglas	5,061	13.2	13.5	10.8	15.0

* 1965 Population Density computed using 1965 population estimates, Center of Population Research & Census, PSC; U. S. Census of Population.

SOURCE - DOUGLAS COUNTY PLANNING COMM.

Table 151

Population Growth in Oregon 1960-1970*

<u>County</u>	<u>1960</u>	<u>1970</u>	<u>% Change</u>
<u>SALEM DISTRICT</u>			
Benton	39,165	53,301	36.1
Clackamas	113,038	164,279	45.3
Clatsop	27,380	27,868	1.7
Columbia	22,379	28,385	27.0
Lincoln	24,635	24,928	1.2
Linn	58,867	64,443	9.5
Marion	120,888	147,602	22.1
Multnomah	522,813	547,865	4.7
Polk	26,523	34,313	29.4
Tillamook	18,955	17,082	- 10.0
Washington	92,237	153,937	66.9
Yamhill	32,478	38,649	19.0
	1,099,358	1,302,652	18.5
<u>EUGENE DISTRICT</u>			
Lane	162,890	212,531	30.4
<u>COOS BAY DISTRICT</u>			
Coos	54,955	55,396	0.9
Curry	13,983	13,735	- 1.7
	68,938	69,131	0.3
<u>ROSEBURG DISTRICT</u>			
Douglas	68,458	73,870	8.0
<u>MEDFORD DISTRICT</u>			
Jackson	73,962	93,177	25.9
Josephine	29,917	35,702	19.4
Klamath	47,475	48,465	2.0
	151,354	177,344	17.8
<u>VALE DISTRICT</u>			
Malheur	22,764	23,012	1.1

* based on advance 1970 census data

<u>City</u>	<u>1960</u>	<u>1970</u>	<u>% Change</u>
Portland	372,676	375,161	0.7
Eugene	50,977	77,174	51.4
Salem	49,142	68,148	38.6
Corvallis	20,669	34,830	68.0
Medford	24,425	27,950	14.4
Springfield	19,616	24,666	25.7
Albany	12,926	17,994	39.0
Beaverton	5,937	17,976	202.8
Milwaukie	9,099	15,990	75.8
Klamath Falls	16,949	15,305	- 9.7
Hillsboro	8,232	14,469	75.7
Lake Oswego	8,906	14,419	62.0
<u>Roseburg</u>	<u>11,467</u>	<u>13,902</u>	<u>21.0</u>
Coos Bay	7,084	13,253	87.0
Pendleton	14,434	13,063	- 9.5
Grants Pass	10,118	12,484	23.4
Ashland	9,119	12,280	34.6
Astoria	11,239	10,240	- 9.0

B. Income

The 1964 statistics of the U.S. Bureau of Census indicated Douglas County had an effective buying income of \$1,738 per capita and \$5,710 per family. In 1966, the estimated median family income fell to \$5,289, which was still higher than the national average. The per capita disposable income in 1966 was \$1,965, somewhat below the national average of \$2,367. In 1968 the effective buying income was \$7,740 per household.

The 1968 publication of the Planning Commission* brought out that 54.4 percent of the total county payroll of \$71,535,727 was paid to employees of the lumber and wood products industry in 1963. Tabulation* indicates that the total annual payroll in 1967 in Douglas County was \$100,264,000 with an average annual payroll per worker of \$6,109. The average for the state is \$6,089, and Douglas County ranks seventh in the state in average payroll per worker.

The publication, Oregon Economic Statistics 1969, by the Bureau of Business and Economic Research, University of Oregon, indicates that the net effective buying income estimate for Douglas County was \$171,489,000, or \$7622 per household, which is 14th out of 36 counties. Net effective buying income is a concept analysis to disposable personal income, as used by the Department of Commerce. It does not include, federal, state, or local taxes.

The city of Roseburg estimate placed net effective buying income at \$42,148,000 or \$8781 per household, which is 5th place in the state. The Dalles is 4th place, and Salem is in 6th place.

DOUGLAS COUNTY

In Douglas County agriculture remained the leading industry until 1940 when logging surpassed it. Income from agriculture in 1964 totaled \$6,635,000, two-thirds being from livestock and livestock products. The remaining one-third was from the sales of crops, with fruit and nuts comprising the largest share, vegetables second, and specialty horticultural and hay crops ranking third. Gross agricultural income during the past few years has approached \$8,000,000 (*1) and has continued to hold second place in the production of family income.

	1960	1961	1962	1963	Josephine County
\$1,000 - \$1,999	8.3	6.8	5.8	7.2	10.3
\$2,000 - \$2,999	7.2	6.3	7.1	6.3	8.2
\$3,000 - \$3,999	6.6	7.6	8.5	8.6	10.0
\$4,000 - \$4,999	11.8	13.6	13.9	12.5	12.8
\$5,000 - \$5,999	14.3	16.8	16.2	16.5	14.8
\$6,000 - \$6,999	12.4	14.3	13.2	13.5	11.1
\$7,000 - \$7,999	9.8	9.8	9.8	9.3	7.6
\$8,000 - \$8,999	7.2	7.3	6.8	6.2	5.8
\$9,000 - \$9,999	5.1	5.0	5.1	4.6	3.7
\$10,000 - \$14,999	9.9	8.6	8.1	8.1	7.0
\$15,000 - \$24,999	2.8	2.0	1.7	3.8	1.0
\$25,000 & over	1.2	0.5	0.7	0.9	0.8

Source: U. S. Census of Population

*See Bibliography

DOUGLAS COUNTY

INCOME OF FAMILIES IN 1959

PERCENTAGE DISTRIBUTION OF FAMILIES BY INCOME GROUP AND COUNTY

Income Group	The State	Coos County	Douglas County	Jackson County	Josephine County
Less than \$1,000	3.6	3.7	3.5	4.4	4.4
\$1,000 - \$1,999	6.3	4.6	5.9	7.2	10.3
\$2,000 - \$2,999	7.2	6.9	7.1	8.3	9.2
\$3,000 - \$3,999	8.4	7.6	8.5	8.6	10.0
\$4,000 - \$4,999	11.8	13.4	13.6	12.5	12.9
\$5,000 - \$5,999	14.3	16.8	16.2	14.5	14.6
\$6,000 - \$6,999	12.4	13.3	13.2	12.6	11.1
\$7,000 - \$7,999	9.8	9.8	9.8	9.3	7.6
\$8,000 - \$8,999	7.2	7.0	6.8	6.2	5.4
\$9,000 - \$9,999	5.1	5.0	5.1	4.6	3.7
\$10,000 - \$14,999	9.9	9.4	8.1	8.1	7.0
\$15,000 - \$24,999	2.8	2.0	1.7	2.8	3.0
\$25,000 & Over	1.2	0.5	0.7	0.9	0.8

Source: U. S. Census of Population.

TOTAL NUMBER OF FAMILIES BY CLASSIFICATION, MEDIAN FAMILY INCOME,
AND SPECIFIED FAMILY INCOME GROUPS

OREGON TOTALS & DOUGLAS COUNTY, 1959

Family Classification	Number of Families	Median Family Income	Income Under \$3,000		Income Under \$2,000	
			# Families	%	# Families	%
<u>All Families</u>						
Oregon	459,812	85,892	78,195	17.0	45,208	9.8
Douglas County	17,666	5,710	2,895	16.4	1,644	9.3
<u>Rural Families</u>						
Oregon	174,055	N.R.	36,502	21.0	21,688	12.5
Douglas County	12,587	5,540	2,167	17.2	1,269	10.1
<u>Rural Farm Families</u>						
Oregon	36,993	4,824	10,092	27.3	6,067	16.4
Douglas County	1,410	4,930	407	28.9	242	17.6

Source: U. S. Census of Population.

Rank Order of Percent of Families with an Income of Less than \$3,000 in Oregon,
for Douglas County: 1960

Douglas County -- Rank in State, 8

DOUGLAS COUNTY

NET EFFECTIVE BUYING INCOME ESTIMATES
COUNTIES AND SELECTED CITIES
1964

County and City	Net Dollars (thousands)	Per Capita	Per Household
Douglas	\$136,886	\$1,855	\$6,337
Roseburg	35,875	2,526	7,972
Coos	110,864	1,966	6,371
Coos Bay	23,118	2,627	7,706
Jackson	177,299	2,062	6,518
Medford	67,934	2,452	7,227
Josephine	65,019	1,958	6,020
Grants Pass	27,551	2,396	7,064
Lane	397,683	2,161	7,165
Eugene	183,835	2,653	8,356

PERCENT OF HOUSEHOLDS BY INCOME GROUPS

Counties and Cities	A	B	C	D	E
Douglas	23.0	30.1	24.2	12.0	10.7
Roseburg	19.8	25.2	22.7	14.8	17.5
Coos	21.2	30.0	24.6	12.1	12.1
Coos Bay	17.3	25.7	22.3	15.6	19.1
Jackson	26.6	28.1	22.7	10.8	11.8
Medford	22.5	24.5	23.9	14.2	14.9
Josephine	31.5	28.0	20.4	9.1	11.0
Grants Pass	25.6	26.7	21.2	10.8	15.7
Lane	20.7	28.6	24.3	12.5	13.9
Eugene	19.7	25.5	22.9	13.6	16.3

(A) - \$0-\$2,499. (B) - \$2,500-\$3,999. (C) - \$4,000-\$6,999. (D) - \$7,000-\$9,999.
(E) - \$10,000 and over.

Source: Sales Management, June 10, 1965.

DOUGLAS COUNTY

ASSESSED VALUATION OF PROPERTY 1964-65 and 1965-66 Fiscal Years

County	1965-1966	1964-1965
Douglas	\$148,281,612	\$126,015,404
Coos	82,617,082	79,599,740
Jackson	134,449,200	118,912,578
Josephine	49,047,578	44,115,941
Lane	291,571,580	265,942,649

Source: Oregon State Tax Commission.

BANK DEBITS: 1962 - 1965 (Thousands)

County	1965	1964	1963	1962
Douglas	\$ 762,180	\$ 695,112	\$ 617,358	\$ 563,629
Coos	469,062	483,649	454,034	408,920
Jackson	1,093,959	983,676	898,550	857,008
Josephine	315,121	294,516	273,083	259,642
Lane	2,590,654	2,298,305	1,990,150	1,784,269

Source: Bureau of Business and Economic Research, University of Oregon.

BANK DEPOSITS: 1962 - 1965 (Thousands)

County	1965	1964	1963	1962
Douglas	\$ 94,466	\$ 88,700	\$ 79,496	\$ 73,060
Coos	79,903	73,148	67,384	64,177
Jackson	113,168	95,781	88,910	84,304
Josephine	45,795	40,340	37,187	34,137
Lane	216,776	200,160	179,231	171,958

Source: Oregon State Banking Department.

1966 FAMILY INCOME
DOUGLAS COUNTY
UNITED STATES

PERCENT OF FAMILIES - 1966

[illegible]

SOURCE - OFFICE OF ECONOMIC OPPORTUNITY

THE UNIVERSITY OF CHICAGO

1954-1955

1954-1955

1954-1955

1954-1955

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1954-1955

POVERTY INDICATORS

SOCIO-ECONOMIC INDICATORS	U N F A V O R A B L E				F A V O R A B L E			
	EXT	SIG	MOD	NORMAL	MOD	SIG	EXT	
	□	□	□	□	*	□	□	□
MAGNITUDE OF POVERTY								IIIIIIIIIIIIIIIIII*
SEVERITY OF POVERTY								*IIIIIIIIIIIIII
ECONOMIC COMPENSATION								*IIIIIIIIIIIIIIIIIIIIII
ECONOMIC ACTIVITY								*IIIIII
FAMILY RESOURCES								*IIIIIIIIII
EMPLOYMENT CONDITIONS								IIIIIIIIIIIIIIIIII*
EDUCATIONAL ACHIEVEMENT								*IIIIIIIIIIIIIIII
FUNCTIONAL ILLITERACY								*IIIIIIIIIIIIIIIIIIII
ADEQUACY OF HEALTH CARE								*IIIIIIIIIIII
HEALTH STATUS								*IIIIIIIIIIIIII
SUFFICIENCY OF HOUSING								IIII*
AGRICULTURAL PROSPERITY								*IIIIIIIIII
	□	□	□	□	*	□	□	□
	EXT	SIG	MOD	NORMAL	MOD	SIG	EXT	
	U N F A V O R A B L E				F A V O R A B L E			

LEGEND...

EXT -- EXTREMELY
SIG -- SIGNIFICANTLY
MOD -- MODERATELY

Table 8 (cont.)

Poverty Indices for Oregon Counties

BLM District and County	Family Income 1960			Unemployment 1963			Housing Conditions 1966	
	Total Families	% Income Under \$3000	% on Pub. Assistance	Total Labor Force	Number Unemployed	Percent Unemployed	Total Units Housing	% Sound Housing
<u>Burns Dist.</u>								
Harney Co.	1680	19.1	2.2	2870	110	3.8	2343	64.9
Grant Co.	2041	16.8	2.0	2920	150	5.1	2910	64.1
<u>Prineville Dist.</u>								
Deschutes Co.	6216	18.1	2.2	9380	530	5.7	8472	73.4
Crook Co.	2540	17.5	3.5	3890	220	5.7	3233	65.7
Wasco Co.	5342	16.2	2.0	8136	563	6.9	7372	64.5
Jefferson Co.	1817	16.1	0.8	4340	150	3.5	2464	76.5
Gilliam Co.	755	14.9	1.4	1500	60	4.0	1186	45.2
Wheeler Co.	736	14.5	3.1	800	50	6.3	987	65.8
Sherman Co.	674	13.1	0.7	904	37	4.1	885	72.7
<u>Roseburg Dist.</u>								
Douglas Co.	17,666	16.3	2.7	25,230	1430	5.7	22,238	72.5
<u>Coos Bay Dist.</u>								
Coos Co.	14,387	15.2	2.5	20,230	1170	5.8	18,489	69.9
Curry Co.	3736	13.4	1.6	4960	300	6.0	4675	73.9
<u>Eugene Dist.</u>								
Lane Co.	42,014	14.5	2.0	68,340	3220	4.7	52,042	79.3
<u>Lakeview Dist.</u>								
Lake Co.	1877	14.4	1.5	2988	275	9.2	2890	55.5

Table 3
Poverty Indices for Oregon Counties

BLM District and County	Family Income 1960			Unemployment 1963			Housing Conditions 1960	
	<u>Total Families</u>	<u>% Income Under \$3000</u>	<u>% on Pub. Assistance</u>	<u>Total Labor Force</u>	<u>Number Unemployed</u>	<u>Percent Unemployed</u>	<u>Total Units Housing</u>	<u>% Sound Housing</u>
<u>Vale District</u>								
Malheur Co.	5734	28.5	3.3	9506	496	5.2	8053	67.9
<u>Salem District</u>								
<u>Coast R.A.</u>								
Yamhill Co.	8503	26.8	3.3	10,890	940	8.6	11,497	71.7
Lincoln Co.	6812	24.1	3.1	7470	510	6.8	10,380	73.2
Polk Co.	7041	22.6	2.1	11,633	644	5.5	9526	66.1
Columbia Co.	5841	21.6	2.7	6660	410	6.2	8007	71.3
Clatsop Co.	7522	20.3	2.5	9650	740	7.7	12,392	74.5
Tillamook Co.	4861	20.2	2.2	5700	320	5.6	7830	66.1
Benton Co.	9299	16.6	0.9	17,200	550	3.2	11,715	79.0
Washington Co.	24,160	14.2	1.4	40,972	1634	4.0	29,996	81.5
<u>Cascade R.A.</u>								
Marion Co.	28,998	20.9	3.0	49,917	2856	5.7	40,296	76.4
Linn Co.	15,363	18.9	2.7	22,960	1180	5.1	19,489	76.6
Clackamas Co.	30,024	16.4	1.9	51,035	2310	4.5	40,032	76.6
Multnomah Co.	136,561	14.4	4.1	253,377	12,276	4.8	189,548	82.8
<u>Medford Dist.</u>								
Josephine Co.	8168	23.8	3.8	10,660	820	7.7	11,059	76.3
Jackson Co.	19,770	19.8	1.8	27,860	1570	5.6	26,102	73.8
Klamath Co.	12,489	14.4	2.2	17,872	1307	7.3	16,942	72.5
<u>Baker Dist.</u>								
Wallowa Co.	1885	22.4	2.5	2850	160	5.6	2842	68.5
Union Co.	4675	21.8	2.6	6110	310	5.1	6490	64.5
Baker Co.	4578	21.2	3.6	5270	300	5.7	6435	69.4
Umatilla Co.	11,195	17.2	3.8	16,930	241	5.6	15,782	74.1
Morrow Co.	1229	16.5	2.5	1490	110	7.4	1778	67.2

SOURCE - STATE ECONOMIC PROFILE

C. Employment

1. Employment by Sectors and Major Industries (See tabulation, following page)

Douglas County is more or less a self-contained economic unit and the lumber and wood products industry dominates the economic structure. The table reveals that the industry accounts for about 29% of the total county employment, 25% within the Central Umpqua region, and one-third of the employment of the region. Reference 2 says further, that while other industries (e.g., trade and service) are also major employers in the county, they are non-basic, in other words, oriented toward the population of the county itself. As such, they do not underwrite the economic development of the county, but are a part in the production of goods and services for export beyond Douglas County. In this way the lumber and wood products industry accounts for over 73% of all employment in the county.

There are, however, signs of increasing diversification in as much as new employment opportunities in the last 5 years have exceeded those of the lumber and wood products industry by about 5 percent.

2. Unemployment Rates - This District Economic Supplement is being compiled when unemployment approaches it's mid-winter highs, and figures recently released from the Oregon State Employment Service indicate Douglas County is lower than the state average and other comparable areas. The insured unemployment rate for Roseburg is 7.4, compared to 19.1 at Grants Pass, 11.9 at Coos Bay, 9.6 at Eugene, and the state average of 7.5. In Roseburg one year ago, it was 8.3; two years ago, 5.7; seven years ago, 6.3; and nine years ago, 11.7.

1. Employment by Sectors and Major Industries (See caption, following page)

Douglas County is more or less a self-contained economic unit and the lumber and wood products industry dominates the economic structure. The table reveals that the industry accounts for about 33% of the total county employment, 33% within the Central Oregon region, and one-third of the employment of the region. Reference 2 says further, that while other industries (e.g., trade and service) are also major employers in the county, they are non-basic, in other words, oriented toward the population of the county itself. As such, they do not underwrite the economic development of the county, but are a part in the production of goods and services for export beyond Douglas County. In this way the lumber and wood products industry accounts for over 33% of all employment in the county.

There are, however, signs of increasing diversification in as much as new employment opportunities in the last 5 years have exceeded those of the lumber and wood products industry by about 5 percent.

2. Unemployment Rates - This District Economic Supplement is being compiled

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C. Employment

1. Employment by Sectors and Major Industries

Tabulation below from Roseburg-Winston Area Transportation Study
Bureau of Governmental Research and Service: Eugene 1968

Tabulation from Population & Employment Study Reference #2 Bibliography

Table 3

REGIONAL DISTRIBUTION OF EMPLOYMENT BY INDUSTRY Douglas County 1966 Annual Average

Industry	SIC Reference	R E G I O N							Douglas County TOTAL
		Central Umpqua R-WATS Area	Central Umpqua Excl. R-WATS	Central Umpqua TOTAL	North County	South County	Coast	East County	
Paper, Lumber, Wood Products Manufacturing	24-26,4210(pt)	3,320	1,030	4,350	900	1,070	1,280	120	7,720
All Other Manufacturing	19-23,27-39	290	70	360	50	405	100	0	915
Mining	10-14	100	25	125	0	90	85	0	300
Transportation, Communi- cation, Utilities	40-49, (ex. 4210,pt)	660	90	750	40	150	65	45	1,050
Wholesale & Retail Trade	50-59	2,680	580	3,260	180	690	250	10	4,390
Business, Repair, Personal & Agriculture Services	07,08,70-76,88	690	500	1,190	190	550	170	0	2,100
Finance, Insurance & Real Estate Services	60-67	460	165	625	30	170	35	0	860
Professional & Health Services	80,81,89	1,150	260	1,410	40	260	50	0	1,760
Education Services	82	670	290	960	140	310	110	20	1,540
Government (ex. Education)	90-94	950	540	1,490	160	640	220	20	2,530
Agriculture	01,02	220	745	965	160	785	110	15	2,035
Contract Construction	15-17	440	230	670	40	250	90	0	1,050
Miscellaneous	09,78,79,84,86	220	65	285	10	70	15	0	380
TOTAL	- - -	11,850	4,590	16,440	1,940	5,440	2,580	230	26,630
Area or Region Total as % of Total County Employment		45%	17%	62%	7%	20%	10%	1%	100%
Proportion of County Population in Area or Region		43%	19%	62%	7%	21%	9%	1%	100%
Employed Persons Residing in Area or Region		11,050	5,415	16,465	1,940	5,460	2,430	145	26,440

EMPLOYMENT AND EMPLOYMENT CHANGES BY INDUSTRIES (DOUGLAS COUNTY - 92010)

1940 to 1950 and 1950 to 1960

Industry	EMPLOYMENT		EMPLOYMENT CHANGE 1940-50		EMPLOYMENT 1960	EMPLOYMENT CHANGE 1950-60	
	1940	1950	Absolute	Percentage		Absolute	Percentage
1. Agriculture	2,723	1,802	-921	-33.8	1,130	-672	-37.3
2. Forestry & Fisheries	120	75	-45	-37.5	244	169	225.3
3. Mining	161	69	-92	-57.1	234	166	240.6
4. Contract Construction	345	1,187	842	244.1	1,079	-108	-9.1
5. Food and Kindred Prod.	89	175	86	96.6	197	21	12.0
6. Textile Mill Products	1	7	6	600.0	0	-7	-100.0
7. Apparel	2	3	1	50.0	0	-3	-100.0
8. Lmb., Wood Prod., Furn.	1,453	8,383	6,929	476.9	8,410	27	0.3
9. Printing & Publishing	48	124	76	158.3	197	73	58.9
10. Chemicals & Allied Prod.	4	3	-1	-25.0	0	-4	-133.3
11. Electrical & Other Mach.	14	113	99	707.1	114	0	0.0
12. Motor Vehicles & Equip.	0	2	2	*	0	-2	-100.0
13. Other Trans. Equip.	2	10	9	450.0	4	-5	-50.0
14. Other Miscellaneous	35	121	85	242.9	284	163	134.7
15. Railroad & RR Express	156	198	43	27.6	106	-91	-46.0
16. Trucking & Warehousing	65	159	94	144.6	292	134	84.3
17. Other Transportation	51	150	100	196.1	139	-11	-7.3
18. Communications	51	158	107	209.8	182	24	15.2
19. Utilities & Sanitary Ser.	107	327	221	206.5	266	-60	-18.3
20. Wholesale Trade	155	302	147	94.8	401	99	32.8
21. Food & Dairy Prod. Stores	263	507	244	92.8	454	-54	-10.7
22. Eat and Drink Places	187	644	458	244.9	660	17	2.6
23. Other Retail Trade	618	1,476	858	138.8	1,891	415	28.1
24. Fin., Ins., Real Est.	98	328	230	234.7	594	266	81.1
25. Hotels & Other Persnl. Serv.	331	545	213	64.4	614	69	12.7
26. Private Households	267	234	-33	-12.4	453	218	93.2
27. Business & Repair Service	150	486	336	224.0	443	-43	-8.8
28. Entertainmt. Recreat. Ser.	47	78	31	66.0	123	45	57.7
29. Medical & Other Prof. Ser.	701	1,452	751	107.1	2,719	1,267	87.3
30. Public Administration	202	466	264	130.7	745	278	59.7
31. Armed Forces	21	16	-4	-19.0	34	18	112.5
32. Industry Not Reported	127	254	127	100.0	484	230	90.6
TOTAL (Region 3010)	8,594	19,854	11,263	131.1	22,493	2,639	13.3

** New industry. Detail will not sum due to rounding.

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EMPLOYMENT AND EMPLOYMENT CHANGES BY INDUSTRIES (STATE OF OREGON)

1940 to 1950 and 1950 to 1960

INDUSTRY	EMPLOYMENT		EMPLOYMENT CHANGE 1940-50		EMPLOYMENT 1960	EMPLOYMENT CHANGE 1950-60	
	1940	1950	Absolute	Percentage		Absolute	Percentage
1. Agriculture	71,335	69,823	-1,512	-2.2	45,937	-23,887	-34.2
2. Forestry & Fisheries	2,055	3,382	1,327	64.6	4,378	996	29.4
3. Mining	2,953	1,650	-1,304	-44.2	1,260	-391	-23.7
4. Contract Construction	20,700	42,927	22,226	107.4	40,345	-2,582	-6.0
5. Food and Kindred Prod.	9,680	13,276	3,596	37.1	18,164	4,888	36.8
6. Textile Mill Products	2,400	2,864	464	19.3	2,468	-396	-13.8
7. Apparel	1,492	2,009	517	34.6	2,959	950	47.3
8. Lmb., Wood Prod., Furn.	48,208	79,758	31,550	65.4	74,916	-4,842	-6.1
9. Printing & Publishing	5,101	7,527	2,426	47.6	8,875	1,347	17.9
10. Chemicals & Allied Prod.	824	1,601	778	94.4	1,835	234	14.6
11. Electrical & Other Mach.	2,262	4,769	2,507	110.8	11,261	6,492	136.1
12. Motor Vehicles & Equip.	481	575	94	19.5	1,293	718	124.9
13. Other Trans. Equipment	513	808	296	57.7	3,850	3,042	376.5
14. Other Miscellaneous	10,608	17,422	6,815	64.2	23,859	6,437	37.1
15. Railroad & RR Express	10,621	15,601	4,980	46.9	12,123	-3,478	-22.3
16. Trucking & Warehousing	5,105	7,997	2,892	56.6	10,172	2,175	27.2
17. Other Transportation	6,389	9,528	3,140	49.1	9,534	6	0.1
18. Communications	3,475	7,838	4,364	125.6	8,731	892	11.4
19. Utilities & Sanitary Ser.	5,213	9,304	4,091	78.5	9,895	591	6.4
20. Wholesale Trade	13,042	23,760	10,718	82.2	28,080	4,320	18.2
21. Food & Dairy Prod. Stores	12,964	16,266	3,307	25.5	15,958	-308	-1.9
22. Eat and Drink Places	11,071	20,813	9,742	88.0	21,416	603	2.9
23. Other Reail Trade	36,617	57,549	20,932	57.2	64,244	6,695	11.6
24. Fin., Ins., Real Est.	11,749	19,573	7,825	66.6	26,063	6,490	33.2
25. Hotels & Other Persnl. Ser.	16,450	19,838	3,388	20.6	20,003	165	0.8
26. Private Households	13,168	12,336	-832	-6.3	16,507	4,172	33.8
27. Business & Repair Service	9,236	16,515	7,279	78.8	16,887	373	2.3
28. Entertainmt. Recreat. Ser.	3,723	5,600	1,877	50.4	4,499	-1,101	-19.7
29. Medical & Other Prof. Ser.	31,227	54,040	22,813	73.1	86,248	32,208	59.6
30. Public Administration	13,987	23,695	9,708	69.4	30,675	6,979	29.4
31. Armed Forces	1,000	2,862	1,862	186.2	5,422	2,560	88.4
32. Industry Not Reported	6,149	7,866	1,718	27.9	16,389	8,523	108.4
TOTAL	389,798	579,372	189,579	48.6	644,246	64,871	11.2

Detail will not sum due to rounding.

Source: Basic dates are from the U. S. Census of Population.

TOTAL LABOR FORCE BY AGE GROUP - 1960

Area	Total Persons 14 & Over	Percent of Pop- ulation	Labor Force			
			Armed Forces	Civilian	Total	% Population 14 & Over
State	1,251,249	70.7	5,422	679,553	684,975	54.7
Douglas County	45,992	67.2	34	24,259	24,293	52.8

AGE DISTRIBUTION OF LABOR FORCE

Age Group	The State		Douglas County	
	Number	Percent	Number	Percent
14 to 24	107,906	15.8	3,727	15.4
25 to 44	290,008	42.3	11,173	46.0
45 to 64	250,502	36.6	8,468	34.8
Over 65	36,559	5.3	915	3.8

RANK ORDER OF PERCENT OF PERSONS UNEMPLOYED
IN OREGON, 1960, DOUGLAS AND SURROUNDING COUNTIES

Rank	County	Total Civilian Labor Force	Number of Persons Unemployed	Percent of Unemployed
2	Josephine	10,423	1,096	10.5
12	Douglas	24,263	1,800	7.4
17	Jackson	26,632	1,882	7.1
22	Coos	20,310	1,199	5.9

Source: U. S. Census of Population.

DOUGLAS COUNTY

RANK ORDER OF PERCENT OF PERSONS UNEMPLOYED
IN OREGON, 1963, DOUGLAS AND SURROUNDING COUNTIES

Rank	County	Total Civilian Labor Force	Number Unemployed	Percent Unemployed
3	Josephine	10,660	820	7.7
12	Coos	20,230	1,170	5.8
16	Douglas	25,230	1,430	5.7
19	Jackson	27,860	1,570	5.6

Source: Oregon Department of Employment.

EMPLOYMENT DISTRIBUTION BY AGE, SEX, AND OCCUPATIONAL GROUPS

MAJOR INDUSTRY GROUP	Employment in Industrial Group*	% of Total Empl.	Females in Group	% of Industrial Group	Under 22	22 to 34	35 to 44	45 to 54	55 to 64	65 and Over	% Over 45
CONSTRUCTION	1,120	5.6	29	2.6	41	431	389	188	65	6	23.1
MANUFACTURING	8,270	41.1	479	5.8	688	2,559	2,528	1,658	771	66	30.2
(a) Lumber Mfg.	7,550	37.5	425	5.6	652	2,378	2,306	1,485	678	51	29.3
TRANSPORTATION, COMM., & UTILITIES	890	4.4	185	20.8	45	240	334	202	57	12	30.4
TRADE	3,250	16.2	1,471	45.3	562	783	968	680	219	38	28.8
FINANCE INSURANCE & REAL ESTATE	630	3.1	259	41.1	27	144	183	122	98	56	43.8
SERVICE & MISCELLANEOUS	2,150	10.7	1,092	50.8	259	490	563	551	241	46	39.0
GOVERNMENT	3,810	18.9	1,385	36.4	153	1,051	962	889	647	108	43.1
(a) Education	1,490	7.4	843	56.6	36	416	383	320	295	40	44.0
TOTAL	20,120	100.0	4,900	24.4	1,775	5,698	5,927	4,290	2,098	332	33.4

*October 1965

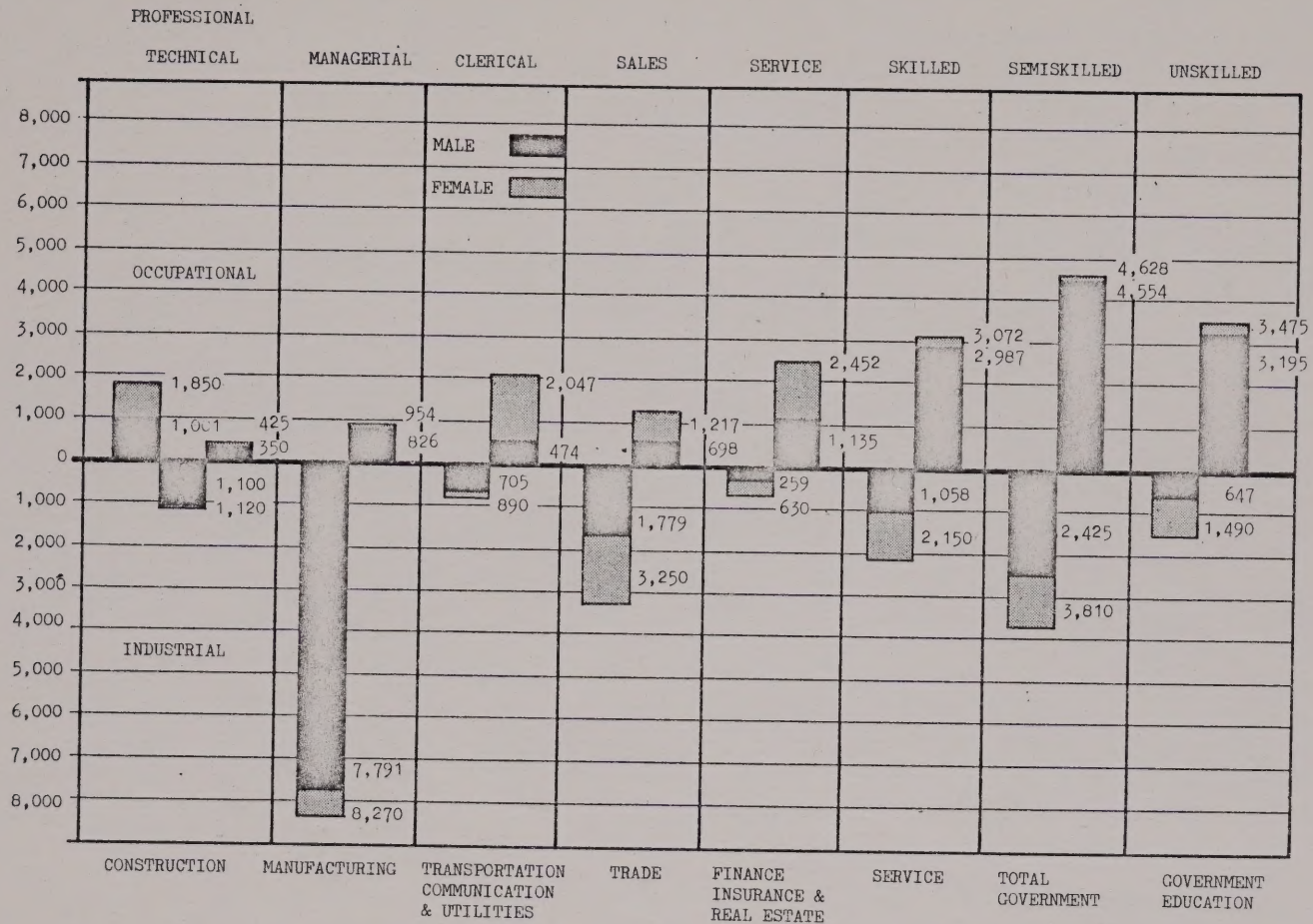
The overall picture of the employed workers is one of a group younger than the state or national average, with a lower than usual percentage employed in the professional, technical and clerical groups.

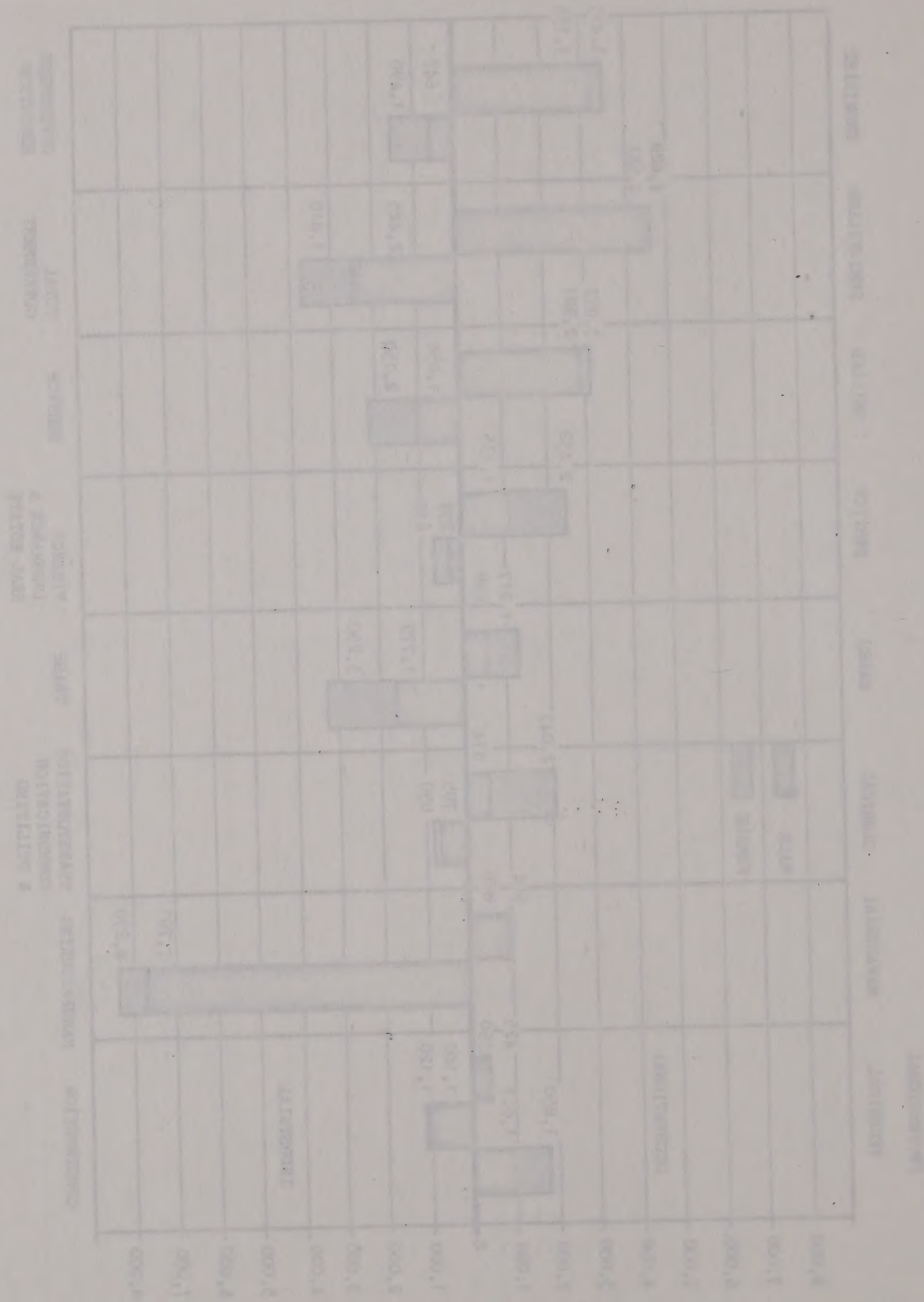
Lack of employment opportunities for females stems mostly from the predominance of lumber manufacturing where, traditionally, there are very few jobs for women.

EMPLOYMENT DISTRIBUTION BY AGE, SEX, AND INDUSTRIAL GROUPS

OCCUPATIONAL GROUP	Employment in Occupational Group*	% of Total Empl.	Females in Group	% of Industrial Group	Under 22	22 to 34	35 to 44	45 to 54	55 to 64	65 and Over	% Over 45
PROFESSIONAL	1,850	9.2	849	45.9	33	654	469	374	264	56	37.5
TECHNICAL	425	2.1	75	17.6	41	156	107	85	31	5	28.5
MANAGERIAL	954	4.7	128	13.4	4	184	318	290	108	50	47.0
CLERICAL	2,047	10.2	1,573	76.8	223	511	642	459	180	32	32.8
SALES	1,217	6.0	519	42.6	160	253	362	277	123	42	36.3
SERVICE	2,452	12.2	1,317	53.7	325	482	558	588	424	75	44.3
SKILLED	3,072	15.3	85	2.8	50	635	1,123	850	382	32	41.1
SEMISKILLED	4,628	23.0	74	1.6	346	1,449	1,512	917	381	23	28.5
UNSKILLED	3,475	17.3	280	8.1	593	1,374	836	450	205	17	19.3
TOTAL	20,120	100.0	4,900	24.4	1,775	5,698	5,927	4,290	2,098	332	33.4

FEMALE EMPLOYMENT PARTICIPATION





ПОКАЗАТЕЛИ ТЕМПЕРАТУРЫ

District Economy - D 1 - Forest Industries

	<u>1955</u>	<u>1965</u>
<u>Coast Region</u>		
Sawmills	2	3
Plywood		2
Veneer		
<u>North Region</u>		
Sawmills	19	4
Plywood		1
Veneer	1	
<u>Central Region</u>		
Sawmills	32	10
Plywood		8
Veneer	1	6
<u>South Region</u>		
Sawmills	14	5
Plywood	2	
Veneer	<u>1</u>	<u>2</u>
	72	41

This compilation is from the foregoing forest industries map published by the County Planning Commission, and is not the most recent directory count or up-to-date figure. The West Coast Lumbermans Association reports 28 sawmills in Douglas County in 1965, as compared to the above figures of 22. It is shown to represent a trend.

District Economy - D I - Forest Industries

This compilation is from the foregoing forest
 Industries map published by the County Planning
 Commission, and is not the most recent directory
 count or up-to-date figure. The West Coast Lumberman's
 Association reports 28 sawmills in Douglas County in
 1965, as compared to the above figures of 22. It is
 shown to represent a trend.

PRIMARY FOREST PRODUCTS INDUSTRIES

DOUGLAS COUNTY
OREGON

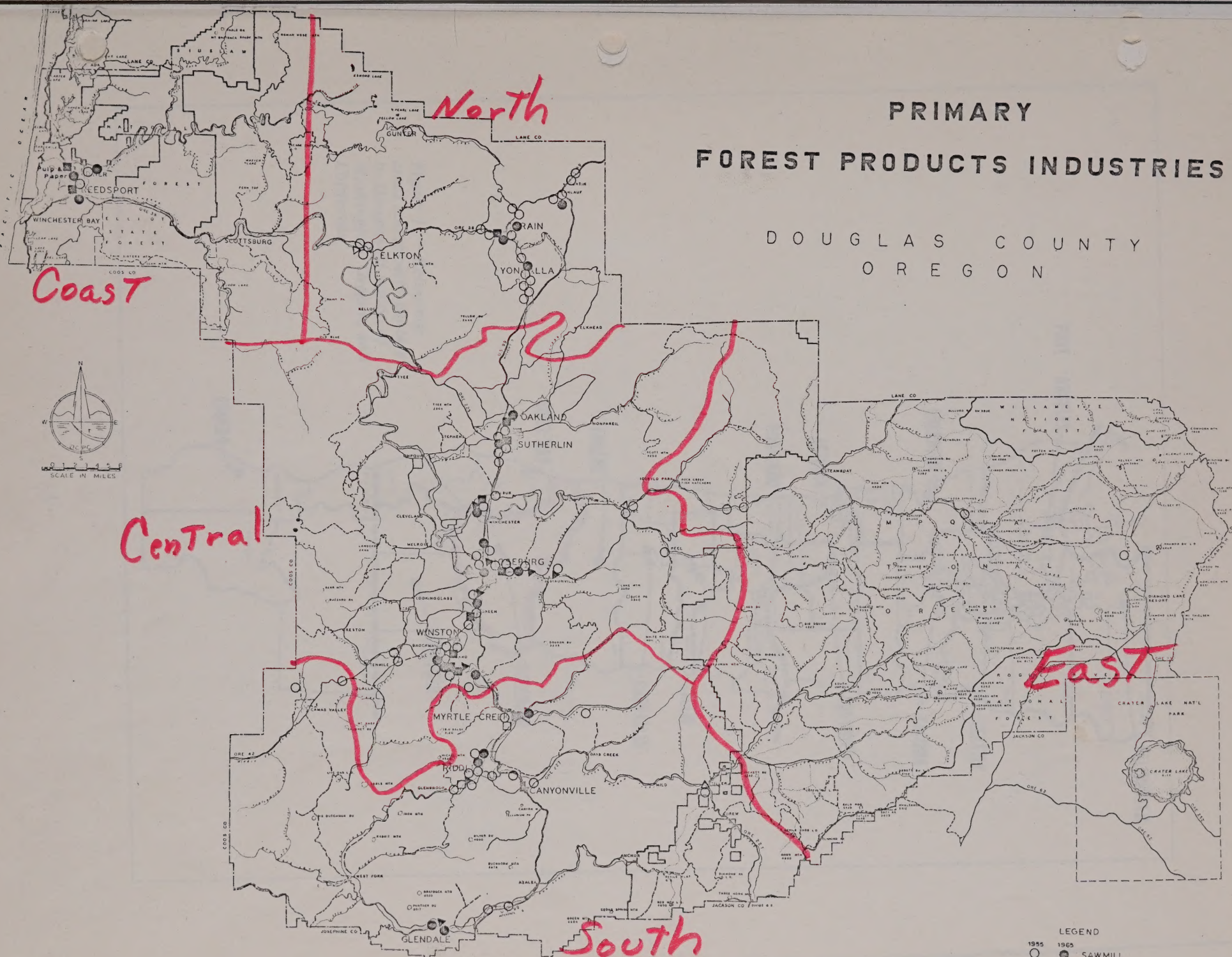
Central

East

South

North

Coast



LEGEND	
1955	1965
○	● SAWMILL
□	■ PLYWOOD
△	▲ VENEER



Figure 1. — Economic areas and growth centers in Douglas-fir region of Washington, Oregon, and California.

OREGON TIMBER INDUSTRIES - 1968

Wood Consumption & Mill Characteristics
by E. R. Mock, G. A. Choate, D. R. Gedney
State Dept. of Forestry - P.N.W. Exp. Sta.

From Table 9 - Numbers of sawmills in Oregon by mill-size class,
area and County - 1968

<u>County</u>	<u>All Classes</u>	<u>Mill Size Class</u>			
		<u>D</u>	<u>C</u>	<u>B</u>	<u>A</u>
Douglas	28	7	5	9	7
Lane	41	9	10	12	10
Coos	14	3	2	5	4

Mill Size - Class A = 120,000 bd. ft. per 8 hour shift
Class B = 80,000 - 119,000 bd. ft.
Class C = 40,000 - 79,000 bd. ft.
Class D = less than 40,000 bd. ft.

94% of 6.2 billion bd. ft. consumed in 1968 was by sawmills.

Table 17 - Log Consumption by Sawmills in Oregon by
timber age group, area, mill size.

<u>Area</u>	<u>Mill Size Class</u>	<u>All Age Groups</u>	<u>Old Growth (100+ yrs.)</u>	<u>Young Growth (less than 100)</u>
Southwest	D	56,542	22,015	34,527
	C	89,436	67,130	22,306
	B	570,864	387,755	183,109
	A	<u>933,762</u>	<u>807,372</u>	<u>126,390</u>
		1,650,604	1,284,272	366,332
Total State		5,863,324	4,168,207	1,695,117

Wood Consumption & Mill Characteristics
by E. R. Mock, G. A. Choate, D. R. Gentry
State Dept. of Forestry - P.O. Box 100, Astoria, Ore.

From Table 9 - Numbers of sawmills in Oregon by mill-size class,
area and County - 1968

County	All Classes	D	C	B	A
Douglas	38	5	2	9	7
Lane	41	9	10	12	10
Coos	14	3	2	2	4

Mill Size - Class A = 120,000 bd. ft. per 8 hour shift
Class B = 80,000 - 119,000 bd. ft.
Class C = 40,000 - 79,000 bd. ft.
Class D = less than 40,000 bd. ft.

94% of 6.2 billion bd. ft. consumed in 1968 was by sawmills.

Table 17 - Log Consumption by Sawmills in Oregon by
timber age group, area, mill size.

Area	Mill Size Class	All Age Groups	Old Growth (100+ yrs.)	Young Growth (less than 100)
Southwest	D	56,542	22,012	34,527
	C	89,436	67,136	22,300
	B	270,864	387,722	183,109
	A	933,762	807,372	126,390
		1,650,604	1,284,242	368,332
Total State		2,863,324	4,168,207	1,692,117

VENEER & PLYWOOD INDUSTRY

Oregon has annually produced more plywood than any other state for the past 25 years. Lane County leads in number of mills with 34. Fifty-nine mills produced veneer only, 58 produced veneer and plywood, and 21 made plywood from veneer produced in other mills. Douglas County has the greatest capacity in veneer mills, Josephine in lay up mills, and Lane County in integrated veneer and plywood.

PULP and BOARD

Oregon's production of 2.1 million tons of wood pulp in 1968 was more than 5% of the national total. Ninety-seven percent of the consumed wood fiber is in the form of residue, in the form of chips, shavings, sawdust.

1.8 billion board feet of logs were used, as well as 5.3 million tons of chips, sawdust, peeler dross, and other mill residues.

The leading counties in log consumption were Lane (1.8 billion board feet Scribner), Douglas (1.1 billion), and Coos (0.8 billion).

Sawmills used 61 percent of the roundwood volume, with veneer and plywood mills accounting for most of the remainder.

88 percent of the logs were from sound live timber; 74 percent was from old growth.

97 percent of the wood used by pulp and board mills consisted of residues from other mills, principally sawmills.

57 percent of the roundwood volume came from public timberlands.

Almost two-thirds of the logs were Douglas-fir; veneer and plywood mills used 90 percent Douglas-fir.

96 percent of the log volume came from Oregon timberlands; most of the remainder came from Washington and California.

Residues and Byproducts

15.5 million tons of wood and bark residues were produced; nearly two-thirds came from sawmills and one-third from veneer and plywood mills.

79 percent of all mill residues was wood; 21 percent was bark.

81 percent of all residues was subsequently used; utilization amounted to 47 percent for wood residues and 37 percent for bark.

The 15.5 million tons of mill residues went into pulp and board (71 percent), fuel (21 percent), and miscellaneous other uses (8 percent).

VENNER & PLYWOOD INDUSTRY

Oregon has annually produced more plywood than any other state for the past 25 years. Lane County leads in number of mills with 34. Fifty-nine mills produced veneer only, 28 produced veneer and plywood, and 21 made plywood from veneer produced in other mills. Douglas County has the greatest capacity in veneer mills, Josephine in lay up mills, and Lane County in integrated veneer and plywood.

PULP and BOARD

Oregon's production of 2.1 million tons of wood pulp in 1953 was more than 25 of the national total. Ninety-seven percent of the consumed wood fiber is in the form of residues, in the form of chips, shavings, sawdust.

Product	1953	1952	1951	1950
Pulp	2,100,000	2,000,000	1,900,000	1,800,000
Board	1,200,000	1,100,000	1,000,000	900,000
Veneer	500,000	450,000	400,000	350,000
Other	100,000	100,000	100,000	100,000
Total	3,900,000	3,650,000	3,400,000	3,150,000

HIGHLIGHTS

Mills

- ° 523 mills operated in 1968--300 sawmills, 138 veneer and plywood plants, 37 pulp and board mills, 48 shake and shingle mills.
- ° Lane was the leading county in number of mills with 94, or 18 percent of all mills in the State.
- ° Installed capacity per 8-hour shift amounted to 23 million board feet of lumber, 19 million square feet of 3/8-inch plywood, and 2,846 squares of shakes and shingles. Pulp and board capacity amounted to 13,415 tons per 24-hour shift.

Wood Consumption

- ° 9.6 billion board feet of logs were used, as well as 5.3 million tons of chips, sawdust, peeler cores, and other mill residues.
- ° The leading counties in log consumption were Lane (1.8 billion board feet Scribner), Douglas (1.1 billion), and Coos (0.8 billion).
- ° Sawmills used 61 percent of the roundwood volume, with veneer and plywood mills accounting for most of the remainder.
- ° 88 percent of the logs was from sound live timber; 74 percent was from old growth.
- ° 97 percent of the wood used by pulp and board mills consisted of residues from other mills, principally sawmills.
- ° 57 percent of the roundwood volume came from public timberlands.
- ° Almost two-thirds of the logs were Douglas-fir; veneer and plywood mills used 90 percent Douglas-fir.
- ° 96 percent of the log volume came from Oregon timberlands; most of the remainder came from Washington and California.

Residues and Byproducts

- ° 15.5 million tons of wood and bark residues were produced; nearly two-thirds came from sawmills and one-third from veneer and plywood mills.
- ° 79 percent of all mill residues was wood; 21 percent was bark.
- ° 81 percent of all residues was subsequently used; utilization amounted to 87 percent for wood residues and 57 percent for bark.
- ° The 10.6 million tons of used wood residues went into pulp and board (71 percent), fuel (23 percent), and mulch and other uses (6 percent).

Oregon Timber Industries - 1968

Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

THE INDUSTRY IN PERSPECTIVE

In 1968, Oregon continued as a leading State in output of timber products. The State led all others in production of lumber and softwood plywood--two of the Nation's most important timber products. Oregon's 1968 lumber output was more than one-fifth of the national total and plywood, more than one-half. Oregon is among the leading States in woodpulp production and is the primary producer of particleboard. In the manufacture of these products, Oregon's industry accounted for 17 percent of the 1968 wood consumption by the Nation's primary timber industries. Among the various types of wood consumed by the timber industries, Oregon accounted for 15 percent of the national consumption of saw logs and 50 percent of the veneer and plywood logs. Oregon also provided 20 percent of the country's log exports.

The importance of the industry within the State can be illustrated to some extent by the following information on 1968 employment and payrolls:¹

	<u>Timber industry</u>	<u>Percent of State total</u>
Employees	81,114	15
Payrolls	\$623,450,310	18

The timber industry is an especially important element of the State's manufacturing economy. Timber industries account for 47 percent of the manufacturing employment and 49 percent of the payrolls. As a further comparison, value added by manufacture² in the timber industries in 1967 was roughly \$932 million or about 48 percent of the State's total for all manufacturing.

The importance of the timber industry to the State's economy extends, of course, well beyond the direct employment and payrolls to workers within the industry. Other highly significant economic contributions include tax payments, returns on investments, and market for electric power, logging and milling equipment, and many other goods and services.

Markets For Timber Products

Improved in 1968

Increased activity in national timber markets in 1968 was the principal reason that markets for most of Oregon's timber products improved following the slide which began in 1965. New construction, the Nation's largest market for timber products, was up 5 percent above the 1967 level. The number of new

¹Employment and payroll information is based on tax reports submitted to the State by employers subject to Oregon Department of Employment law. Employment (and associated payrolls) in timber industries include all employees engaged in activities falling within the Census of Manufacturers Classifications of Lumber and Wood Products (SIC 24) and Paper and Allied Products (SIC 26).

²"Value added" includes the interest, wages and salaries, rent, and profit associated with the manufacture of a product. It does not include the cost of raw material purchased from other firms.

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

Table 21.--Origin of logs consumed by sawmills in Oregon by ownership class, area, and county, 1968
(Thousand board feet, Scribner log rule)

Area and county	All owners	National Forest	State	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own lands	Other industry	
Northwest								
Clackamas	285,738	204,508	16,968	8,413	5,140	364	34,181	16,164
Clatsop	71,297	--	3,510	--	--	--	65,232	2,555
Columbia	220,945	58,150	11,324	2,430	--	54,140	87,986	6,915
Hood River	83,800	70,250	--	--	1,010	--	2,140	10,400
Marion	93,260	40,695	5,890	16,352	--	--	21,413	8,910
Multnomah	97,810	33,827	846	1,584	--	4,759	7,350	49,444
Polk	131,222	31,363	3,890	23,655	1,560	21,799	45,465	3,490
Tillamook	124,588	14,096	22,114	11,956	--	43,863	25,806	6,753
Washington	45,773	--	4,684	6,719	850	14,366	1,700	17,454
Yamhill	76,160	38,600	1,700	14,500	--	5,400	12,400	3,560
Total	1,230,593	491,489	70,926	85,609	8,560	144,691	303,673	125,645
West Central								
Benton	197,963	68,921	2,804	65,490	--	19,960	11,446	29,342
Lane	944,893	386,092	1,475	158,060	335	260,138	74,940	63,853
Lincoln	93,542	29,060	6,760	650	--	17,129	30,227	9,716
Linn	268,001	99,928	4,900	26,244	--	6,359	70,940	59,630
Total	1,504,399	584,001	15,939	250,444	335	303,586	187,553	162,541
Southwest								
Coos	448,407	20,978	52,398	78,298	11,858	185,926	73,395	25,554
Curry	144,117	64,485	169	1,167	900	60,978	200	16,218
Douglas	532,340	162,236	13,934	167,048	600	89,032	56,910	42,580
Jackson	360,668	197,024	--	93,541	--	30,459	8,581	31,063
Josephine	165,072	86,987	2,250	53,588	--	633	15,989	5,625
Total	1,650,604	531,710	68,751	393,642	13,358	367,028	155,075	121,040
Central								
Crook	129,588	120,454	--	--	1,352	4,282	1,750	1,750
Deschutes	130,472	84,254	--	--	--	42,750	1,724	1,744
Jefferson, Wheeler, and Wasco ^{1/}	148,387	84,294	--	480	4,000	56,194	--	3,419
Klamath	430,245	166,144	--	2,831	--	231,185	21,100	8,985
Lake	60,960	47,110	--	--	--	--	13,850	--
Total	899,652	502,256	--	3,311	5,352	334,411	38,424	15,898
Blue Mountain								
Baker	66,020	62,220	--	3,780	--	20	--	--
Grant	103,887	76,967	--	--	--	--	19,220	7,700
Harney and Morrow ^{1/}	118,227	81,950	--	833	--	32,444	1,200	1,800
Umatilla	109,612	70,090	--	1,088	--	16,869	13,726	7,839
Union	144,088	111,760	--	1,170	--	18,793	1,170	11,195
Wallowa	36,242	26,250	--	350	--	5,757	435	3,450
Total	578,076	429,237	--	7,221	--	73,883	35,751	31,984
Total, State	5,863,324	2,538,693	155,616	740,227	27,605	1,223,599	720,476	457,108

^{1/} Combined to avoid disclosure.

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

Joint Study by State Dept. of Forestry - P.N.W. Exp. Sta.

Table 22.--Relative dependency for logs of sawmills in Oregon by ownership
origin, area, and mill-size class, 1968
(Number of mills)

Area and mill-size class	National Forest				State				Bureau of Land Management				Other public				Forest industry								Farmer and miscellaneous private			
																	Own lands				Other industry							
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Dependency (percent)																												
Northwest																												
D	40	2	2	3	39	5	1	2	45	1	1	--	46	1	--	--	38	3	1	5	34	3	3	7	13	10	2	22
C	13	3	1	4	15	5	--	1	17	4	--	--	21	--	--	--	17	3	1	--	10	2	2	7	9	6	3	3
B	6	2	3	4	8	7	--	--	8	6	1	--	13	2	--	--	11	2	--	2	6	3	2	4	8	6	1	--
A	2	4	6	2	8	6	--	--	7	7	--	--	11	3	--	--	10	1	1	2	4	8	1	1	9	4	1	--
Total	61	11	12	13	70	23	1	3	77	18	2	--	91	6	--	--	76	9	3	9	54	16	8	19	39	26	7	25
West Central																												
D	12	5	4	1	16	6	--	--	18	3	1	--	21	1	--	--	22	--	--	--	11	2	4	5	6	7	3	6
C	8	1	6	5	15	4	1	--	10	6	2	2	20	--	--	--	14	3	2	1	10	8	--	2	11	6	2	1
B	3	3	8	7	19	2	--	--	6	9	3	3	21	--	--	--	16	4	--	1	16	4	1	--	7	13	--	1
A	5	4	4	3	16	--	--	--	6	8	2	--	16	--	--	--	8	4	--	4	11	3	1	1	12	2	2	--
Total	28	13	22	16	66	12	1	--	40	26	8	5	78	1	--	--	60	11	2	6	48	17	6	8	36	28	7	8
Southwest																												
D	9	5	3	3	14	3	1	2	15	4	1	--	19	1	--	--	18	1	1	--	15	2	1	2	5	4	6	5
C	5	1	1	2	8	1	--	--	3	1	1	4	9	--	--	--	7	2	--	--	6	3	--	--	6	2	--	1
B	5	8	5	5	17	5	--	1	6	11	4	2	22	--	1	--	15	6	1	1	17	3	1	2	14	6	2	1
A	7	1	8	4	15	5	--	--	4	9	6	1	19	1	--	--	7	10	--	3	13	5	1	1	12	8	--	--
Total	26	15	17	14	54	14	1	3	28	25	12	7	69	2	1	--	47	19	2	4	51	13	3	5	37	20	8	7
Central																												
D	--	--	--	3	3	--	--	--	3	--	--	--	3	--	--	--	3	--	--	--	3	--	--	--	2	1	--	--
C	1	--	2	8	11	--	--	--	9	2	--	--	10	1	--	--	9	1	1	--	6	3	1	1	7	4	--	--
B	1	--	--	5	6	--	--	--	5	1	--	--	5	1	--	--	5	--	--	1	5	1	--	--	5	1	--	--
A	1	--	2	2	5	--	--	--	5	--	--	--	5	--	--	--	1	1	2	1	5	--	--	--	4	1	--	--
Total	3	--	4	18	25	--	--	--	22	3	--	--	23	2	--	--	18	2	3	2	19	4	1	1	18	7	--	--
Blue Mountain																												
D	6	2	1	1	10	--	--	--	10	--	--	--	10	--	--	--	4	--	2	4	9	--	1	--	6	1	--	3
C	--	--	2	7	9	--	--	--	6	3	--	--	9	--	--	--	7	1	1	--	5	3	--	1	7	2	--	--
B	--	1	--	3	4	--	--	--	3	1	--	--	4	--	--	--	2	1	--	1	4	--	--	--	2	2	--	--
A	--	--	1	3	4	--	--	--	1	3	--	--	4	--	--	--	--	4	--	--	1	3	--	--	1	3	--	--
Total	6	3	4	14	27	--	--	--	20	7	--	--	27	--	--	--	13	6	3	5	19	6	1	1	16	8	--	3
Total, State																												
D	67	14	10	11	82	14	2	4	91	8	3	--	99	3	--	--	85	4	4	9	72	7	9	14	32	23	11	36
C	27	5	12	26	58	10	1	1	45	16	3	6	69	1	--	--	54	10	5	1	37	19	3	11	40	20	5	5
B	15	14	16	24	54	14	--	1	28	28	8	5	65	3	1	--	49	13	1	6	48	11	4	6	36	28	3	2
A	15	9	21	14	48	11	--	--	23	27	8	1	55	4	--	--	26	20	3	10	34	19	3	3	38	18	3	--
Total	124	42	59	75	242	49	3	6	187	79	22	12	288	11	1	--	214	47	13	26	191	56	19	34	146	89	22	43

1/ Mill-size classes identified as follows: Class A mills = 120,000+ board-foot c.
40,000.

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

Joint Study by State Dept. of Forestry - P.N.W. Exp. Sta.

Table 32.--Number of veneer and plywood mills in Oregon by type of mill, area, and county, 1968

Area and county	All types	Veneer only	Layup only	Veneer and layup
Northwest				
Clackamas	3	2	1	--
Clatsop	1	--	--	1
Columbia	1	--	--	1
Marion	2	2	--	--
Multnomah	5	2	--	3
Polk	4	1	--	3
Tillamook	2	--	--	2
Washington	2	2	--	--
Yamhill	3	1	1	1
Total	23	10	2	11
West Central				
Benton	4	2	2	--
Lane	34	17	3	14
Lincoln	3	2	--	1
Linn	13	3	3	7
Total	54	24	8	22
Southwest				
Coos	10	4	1	5
Curry	7	4	--	3
Douglas	18	9	3	6
Jackson	11	3	3	5
Josephine	6	--	4	2
Total	52	20	11	21
Central				
Jefferson	1	1	--	--
Klamath	3	2	--	1
Total	4	3	--	1
Blue Mountain				
Baker	1	--	--	1
Grant	2	2	--	--
Harney	1	--	--	1
Union	1	--	--	1
Total	5	2	--	3
Total, State	138	59	21	58

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

Table 33.--Installed 8-hour capacity of veneer and plywood mills in Oregon
by type of mill, area, and county, 1968
(Thousand square feet, 3/8-inch basis)

Area and county	Veneer only	Layup only	Veneer and layup
Northwest			
Clackamas	215	126	--
Clatsop	--	--	100
Columbia	--	--	240
Marion	350	--	--
Multnomah	81	--	360
Polk	100	--	490
Tillamook	--	--	285
Washington	521	--	--
Yamhill	100	70	120
Total	1,367	196	1,595
West Central			
Benton	215	435	--
Lane	2,586	755	3,578
Lincoln	210	--	180
Linn	497	1,108	1,063
Total	3,508	2,298	4,821
Southwest			
Coos	440	248	1,342
Curry	433	--	690
Douglas	4,091	700	3,101
Jackson	796	520	1,325
Josephine	--	1,155	460
Total	5,760	2,623	6,918
Central			
Jefferson	150	--	--
Klamath	220	--	100
Total	370	--	100
Blue Mountain			
Baker	--	--	125
Grant	122	--	--
Harney	--	--	105
Union	--	--	200
Total	122	--	430
Total, State	11,127	5,117	13,864

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

by E. R. Manock, G. A. Choate, D. R. Gedney

Table 42.--Origin of logs consumed by veneer and plywood mills in Oregon by ownership class, area, and county, 1968
(Thousand board feet, Scribner log rule)

Area and county	All owners	National Forest	State	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own lands	Other industry	
Northwest								
Clackamas, Clatsop, Columbia, and Marion ^{1/}	155,107	120,746	12,941	--	--	15,423	5,997	--
Multnomah	113,000	56,036	31,156	5,624	--	4,272	15,200	712
Polk	127,787	17,098	--	29,759	1,521	57,811	10,647	10,951
Tillamook and Washington ^{1/}	66,750	1,295	12,760	30,750	--	5,060	16,885	--
Yamhill	47,443	13,987	1,140	24,030	--	3,696	--	4,590
Total	510,087	209,162	57,997	90,163	1,521	86,262	48,729	16,253
West Central								
Benton	28,591	9,328	215	14,250	--	4,798	--	--
Lane	881,730	362,615	640	125,037	--	254,836	68,488	70,114
Lincoln	73,081	28,750	--	--	--	43,081	250	1,000
Linn	315,975	101,382	--	69,964	--	49,274	35,052	60,303
Total	1,299,377	502,075	855	209,251	--	351,989	103,790	131,417
Southwest								
Coos	368,006	23,405	9,976	50,112	--	273,764	2,721	8,028
Curry	106,385	55,375	1,260	1,260	--	40,882	2,380	5,228
Douglas	591,560	172,292	6,295	183,707	--	193,645	17,966	17,655
Jackson	385,024	154,943	--	73,476	--	63,900	--	92,705
Josephine	64,042	17,171	--	45,221	--	--	--	1,650
Total	1,515,017	423,186	17,531	353,776	--	572,191	23,067	125,266
Central								
Jefferson and Klamath ^{1/}	97,853	36,207	--	--	--	30,000	4,912	26,734
Blue Mountain								
Baker, Grant, Harney, and Union ^{1/}	156,160	101,755	--	2,480	--	39,085	680	12,160
Total, State	3,578,494	1,272,385	76,383	655,670	1,521	1,079,527	181,178	311,830

^{1/} Combined to avoid disclosure.

Oregon Timber Industries - 1968
Wood Consumption and Mill Characteristics

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Joint Study by State Dept. of Forestry - P.N.W. Exp. Sta.

(Thousands and partial feet, Scribner log rule)

Ownership	State	County	Forest	Private	Government	Riparian	Land	Open	Timber	Other	Total	Value
General	Oregon	All	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
General	Washington	All	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
General	California	All	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
			1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000

The great bulk of wood residues (93 percent) was used as raw material for byproducts. The disposition of coarse and fine residues is shown in figure 13, and the variation in use of all residues is shown below.

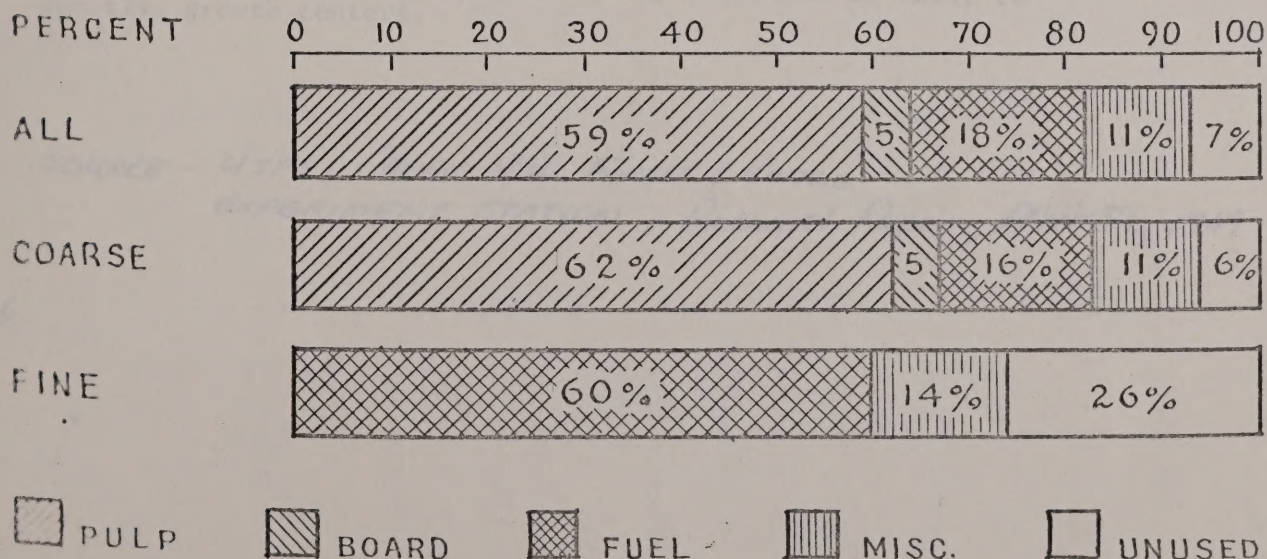
<u>Area</u>	<u>Pulp</u>	<u>Board</u>	<u>Fuel</u>	<u>Misc.</u>	<u>Unused</u>
	<u>Percent</u>				
Northwest	53	6	19	16	6
West Central	55	6	21	11	7
Southwest	66	4	15	9	6
Central	80	--	13	7	--
Blue Mountain	57	--	18	13	12

Nearly Two-Thirds of Bark
Residues Were Used

Bark residues from veneer and plywood plants amounted to 1.2 million tons in 1968 (table 48). Sixty-four percent of bark residues were used and of this volume, 86 percent went for fuel, the remainder for other products--principally mulch. Variations from the State average by areas are as follows:

<u>Area</u>	<u>Total bark residue</u>	<u>Fuel</u>	<u>Other</u>	<u>Unused</u>
	<u>Tons</u>	<u>Percent</u>		
Northwest	172,397	53	14	33
West Central	477,876	69	4	27
Southwest	475,008	44	13	43
Central	19,895	63	16	21
Blue Mountain	58,762	34	--	66
State	1,203,938	55	9	36

*Figure 13.--Disposition of Wood Residues From
Veneer and Plywood Production, 1968*



The great bulk of wood residues (93 percent) was used as raw material for paper. The disposition of coarse and fine residues is shown in figure 12, and the variation in use of all residues is shown below.

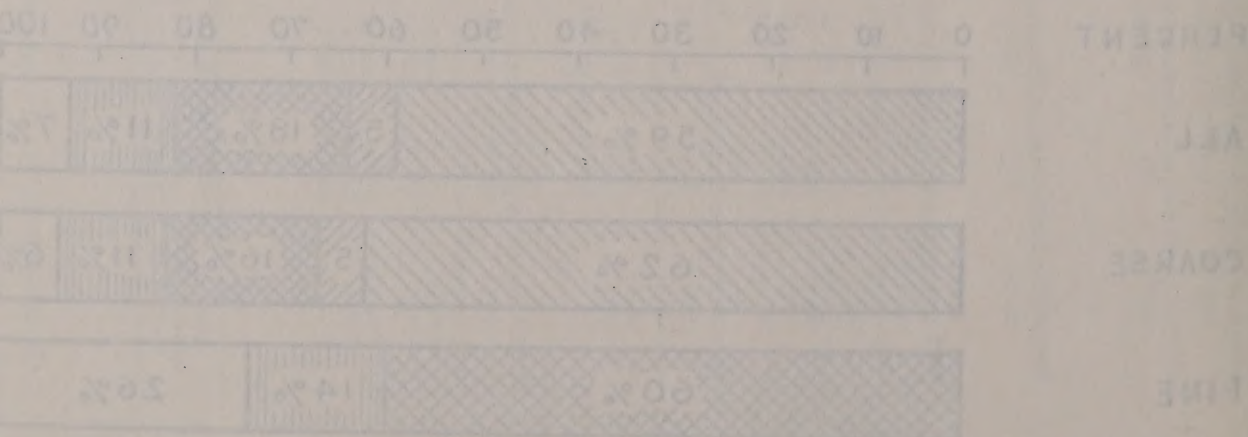
Area	Pulp	Board	Fuel	Misc.	Unused
Northwest	53	6	19	16	6
West Central	55	8	31	11	7
Southwest	66	4	15	9	6
Central	80	—	13	7	—
Blue Mountain	57	—	18	13	12

Figure 12. Two-thirds of bark residues were used.

Bark residues from veneer and plywood plants amounted to 1.2 million tons in 1955 (table 45). Sixty-four percent of bark residues were used and of this volume, 86 percent went for fuel, the remainder for other products—principally mulch. Variations from the State average by area are as follows:

Area	Total bark residue	Fuel	Other	Unused
Northwest	1,73,397	53	14	33
West Central	457,816	69	4	27
Southwest	452,008	44	13	43
Central	19,882	63	10	27
Blue Mountain	38,763	34	—	66
State	1,203,938	52	9	39

Figure 13. Disposition of wood residues from veneer and plywood production, 1955.



PULP BOARD FUEL MISC UNUSED

Table 2.---Classification of economic areas by degree of dependency upon timber-based employment

Dependency	Economic area ^{1/}	Percentage of 1960 excess employment dependent on timber-based employment
Slight	Seattle	6.2
	Portland	23.8
	Salem	29.3
Moderate	Bellingham	30.4
	Tacoma	32.5
	Astoria	63.1
High	Medford	70.0
	Corvallis	74.3
	Eugene	76.6
	Longview	81.5
	Aberdeen	88.1
	Eureka	89.6
	Port Angeles	90.5
	Coos Bay	91.6
	Roseburg	99.4
Douglas-fir region		44.8

^{1/} Economic areas are identified by the names of their respective growth centers.

SOURCE - USFS, PACIFIC N.W. FOREST & RANGE
EXPERIMENT STATION, Research Paper, PNW-89, 1969

DOUGLAS COUNTY

FOREST INDUSTRY STATISTICS
1962-1963

	Oregon		Douglas County			
	Dollars	Per Cent	Dollars	Per Cent	Dollars	Per Cent
FOREST ASSESSMENT & TAXATION						
Assessed value all taxable property	\$3,032,586,929	100	\$119,351,799	100		
Real property assessment	2,262,844,173	75	82,523,410	69		
Timber assessment	80,945,945	3	17,664,590	15		
Forest fee receipts	91,347	---	2,274	---		
VALUE ADDED IN MANUFACTURE (1958)						
All industries	1,222,224,000	100	83,945,000	100		
Lumber and wood products	557,156,000	46	64,653,000	77		
PAYROLLS & EMPLOYMENT (1961)						
All industries	2,068,565,287	100	71,535,727	100		
Lumber and wood products	365,704,516	18	38,924,480	54		
	<u>Persons</u>		<u>Persons</u>		<u>Persons</u>	
Employees, Ave. #						
All industries	419,926	100	14,242	100		
Lumber and wood prod.	66,975	16	7,044	49		
	<u>Thousand bd. ft.</u>		<u>Thousand bd. ft.</u>		<u>Thousand bd. ft.</u>	
LOG PRODUCTION (Scribner Rule)						
Year- 1950	9,719,878	---	988,953	---		
1955	8,385,000	---	1,288,091	---		
1960	7,414,532	---	831,007	---		
196_						
	<u>Number</u>		<u>Number</u>		<u>Number</u>	
NUMBER OF MILLS						
Year- 1950	1,571	---	134	---		
1955	1,174	---	98	---		
1960	709	---	74	---		
196_						

SOURCE - DOUGLAS COUNTY PLANNING COMMISSION



Agriculture Industry - Prior to 1940, agriculture was the leading industry in Douglas County. In 1964, Douglas county has 1,922 farms totaling 528,304 acres and averaging 275 acres per farm. The county leads the state in sheep production with 97,000 head in 1965. Cattle numbered around 35,000 head with 2,900 dairy and 32,000 beef cattle. Poultry raising includes flocks of about 80,000 chickens and 20,000 turkeys. Other commercial crops include small grains, hay, corn, vetch seed crops, potatoes, field peas, vegetables, berries, tree fruits, and nuts, and other horticultural specialty crops. Hay crops comprised about 75% of the total cropland harvested in 1964. Small grains represent the second largest use of cropland. Cropland use for pasture was approximately 70,000 acres, woodland pasture 148,000 acres, improved pasture 40,000 acres, and other pasture (not cropland or woodland) 210,000 acres totaling approximately 468,000 acres used for pasture.

Income from agriculture in 1964 totaled approximately \$6,635,000 with two-thirds coming from livestock and livestock products. The remaining one-third was from the sales crops with fruits and nuts comprising the largest share. Vegetables were second and specialty horticultural and hay crops ranking third with approximately equal share each.

Of the 528,304 acres in farms in Douglas County, only about 125,000 acres are considered tillable by today's standards.

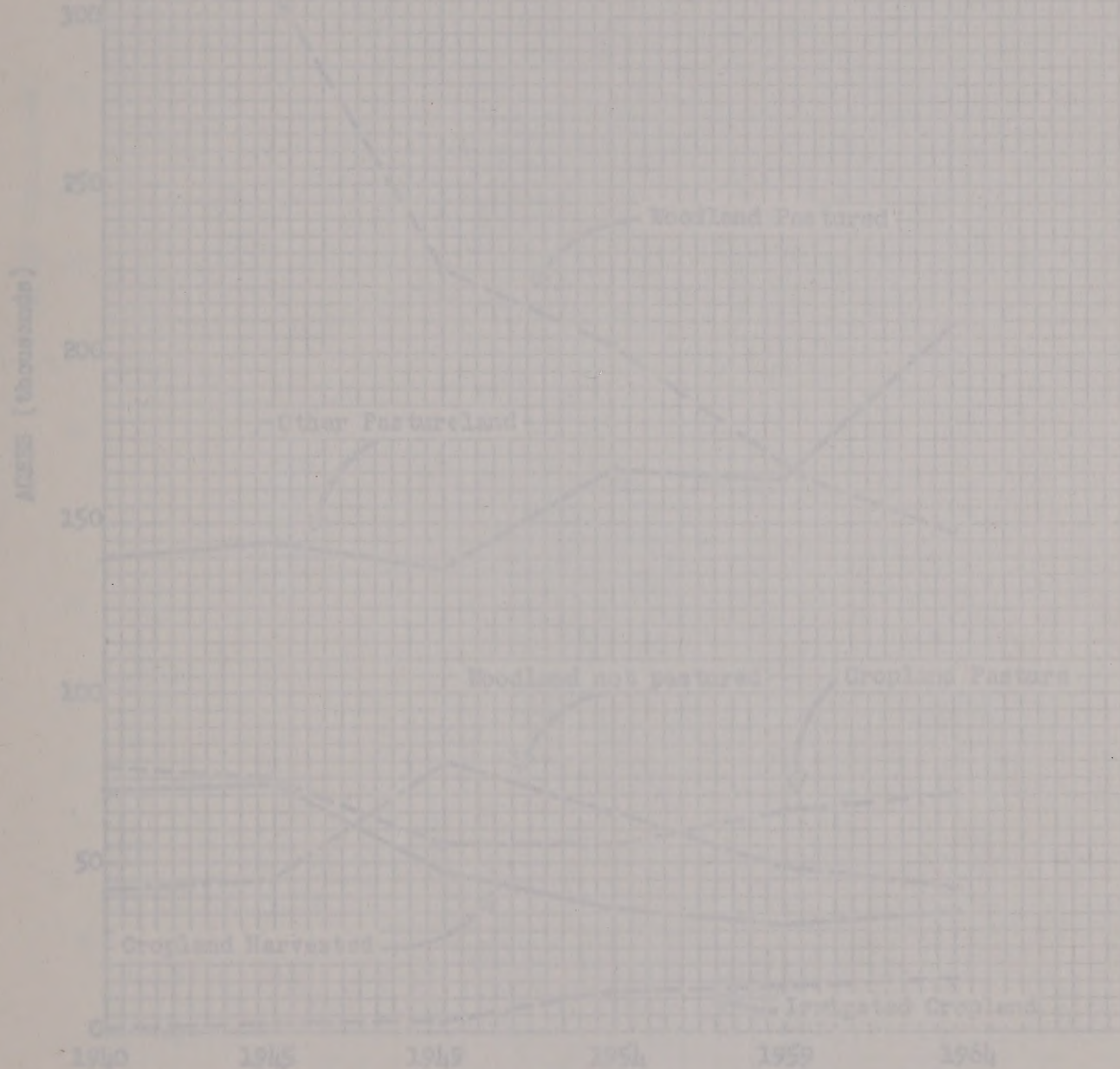
Pasture improvement through brush cleaning, reseeding, and improved fertilization has made it possible to increase sheep numbers by providing more forage per acre.

Trends seem to indicate an increased emphasis on sheep production with cattle a second choice.

Beef consumption is expected to increase by 79% by 1980 over 1960 demand.

No increase demand in lamb and mutton is anticipated.

Much of the increase in beef cattle is expected to come from imports.



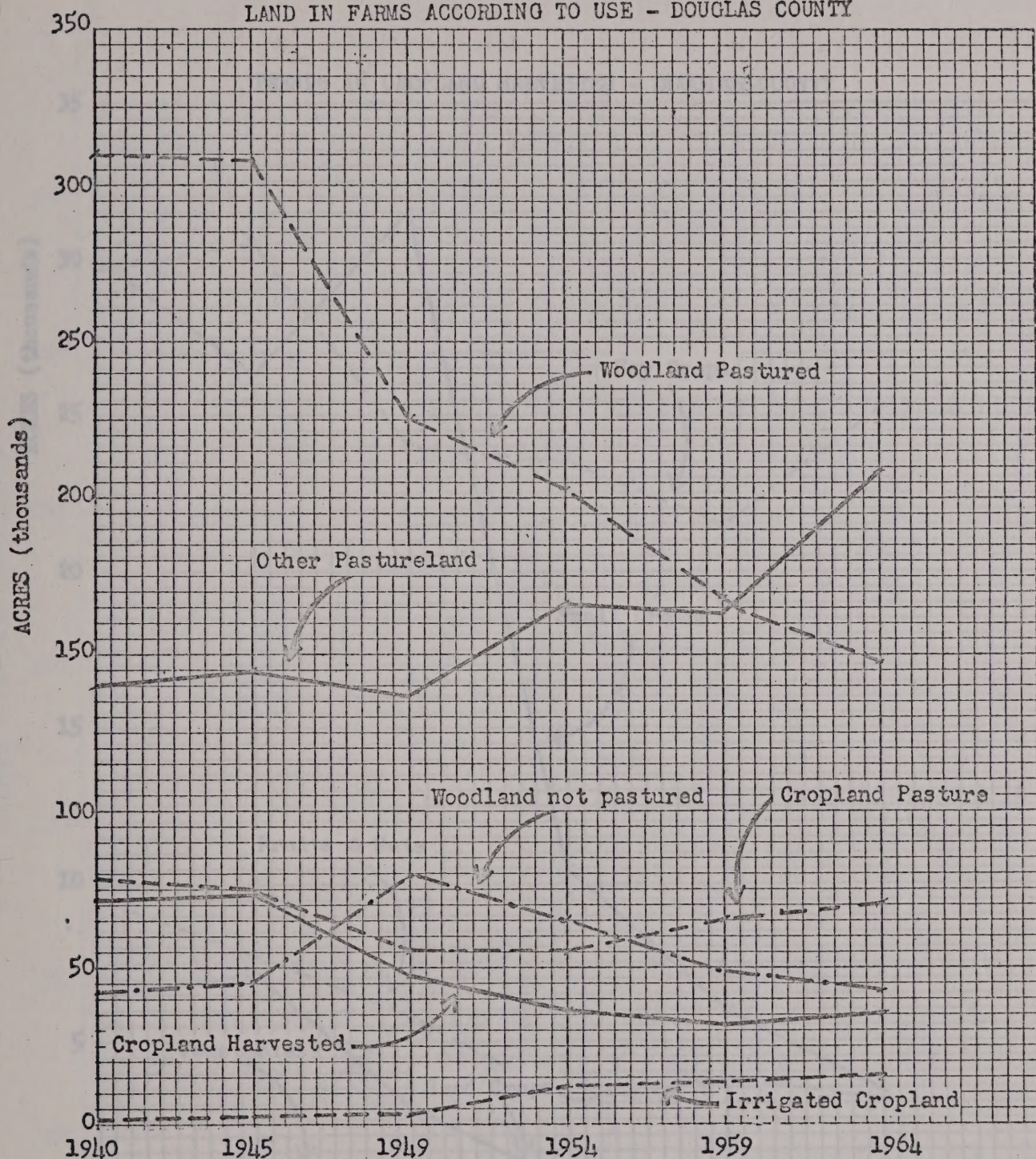
Source: U.S. Census of Agriculture

Beef consumption is expected to increase by 75% by 1980 over 1960 demand.

No increase demand in lamb and mutton is anticipated.

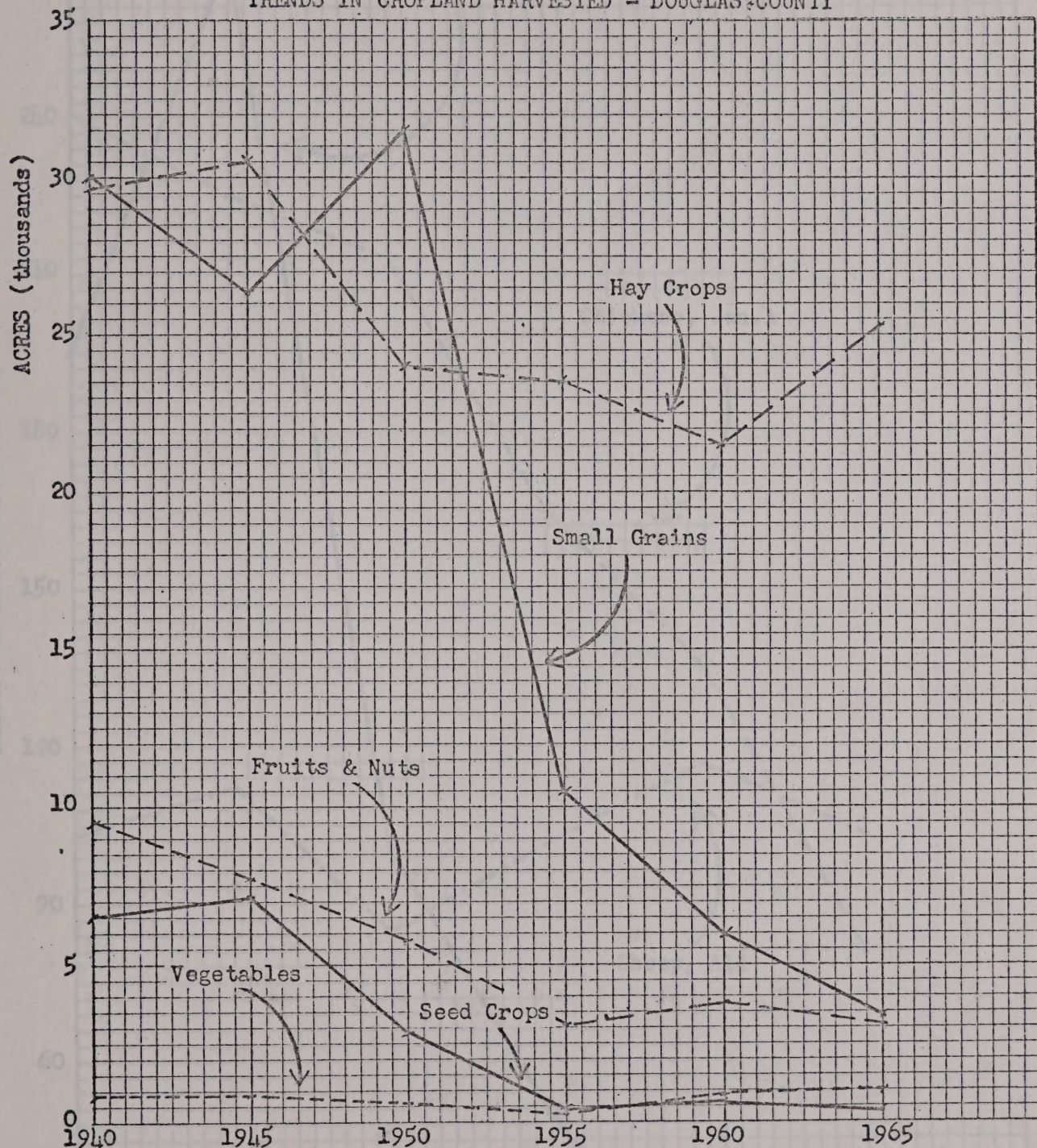
Much of the increase in beef cattle is expected to come from imports.

LAND IN FARMS ACCORDING TO USE - DOUGLAS COUNTY



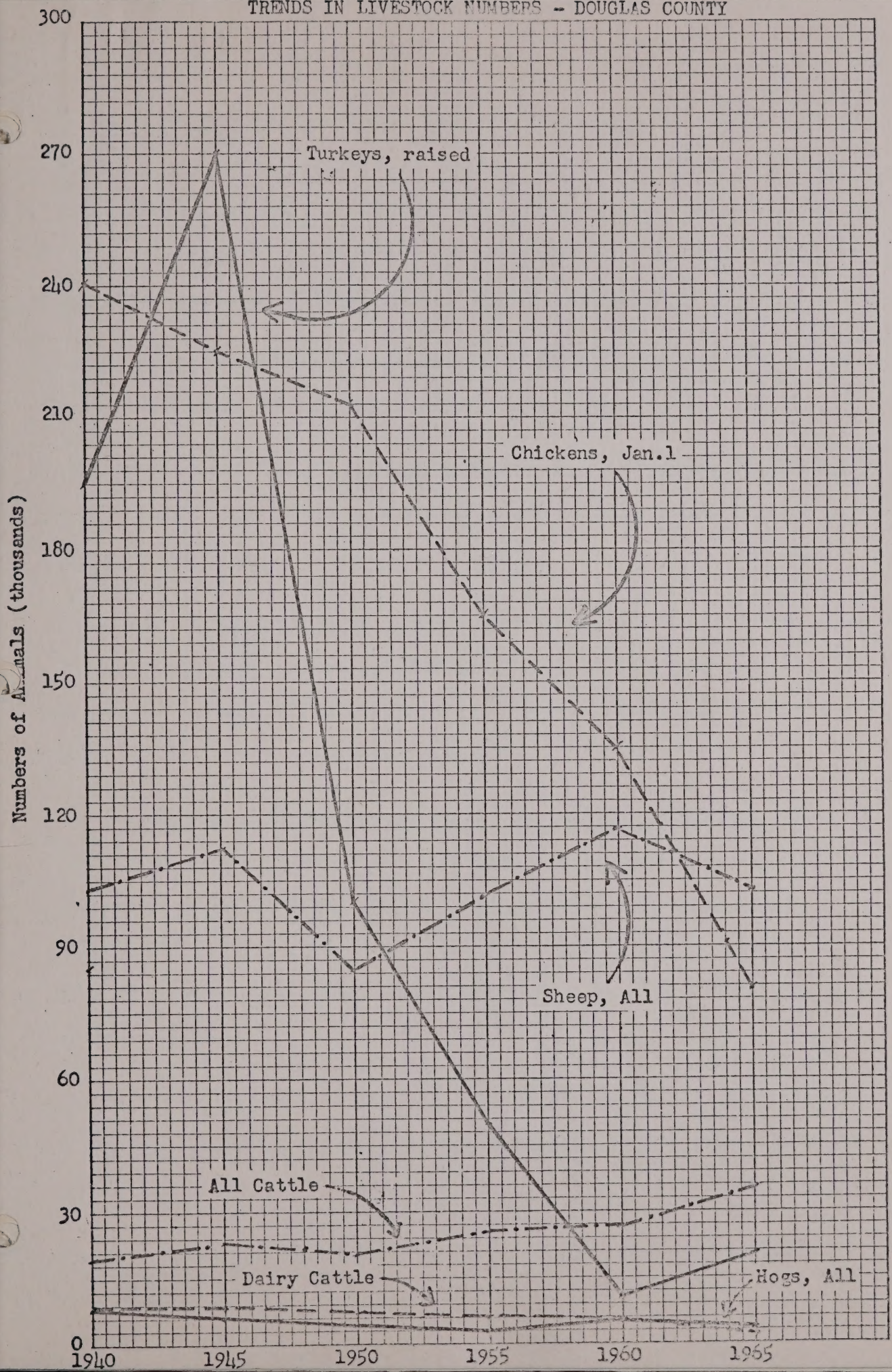
Source: U.S. Census of Agriculture

TRENDS IN CROPLAND HARVESTED - DOUGLAS COUNTY



Source: USDA and Cooperative Extension Service

TRENDS IN LIVESTOCK NUMBERS - DOUGLAS COUNTY



Source: Cooperative Extension Service

Mining Industry - The 1967 Bureau of Mines and Minerals Yearbook gives for the value of mineral production of Douglas County as \$9,929,000 for nickel, sand and gravel, stone and mercury. It is believed this figure does not include the value of 26,000,000 pounds of nickel worth approximately \$1.29 per pound, produced by Hanna Mining Company at Riddle.

Alcona Mining Company at Elkhead has been reported to be producing 5 to 6 flasks of mercury per day from low grade ores. When?

Some of the small former copper produces may become producers at the high (60¢ a pound) price. Some such prospects are Bolivar, Silver Peak, Brushy Butte to name a few.

It is hard to place the value of rock for road construction, concrete manufacture or asphalt concrete manufacture. Low unit cost items like sand and gravel can be used to produce a \$100 of finished product from an in place value of 12½ cents a cubic yard material.

The Oregon Covered Employment and Payroll by Industry and County, Second Quarter (April-June 1967), Oregon Department of Employment Research and Statistics Division, Salem, Oregon; indicated county payrolls totaled \$24,911,988 and that \$750,985 was credited to mining with an additional \$98,255 to stone, clay, and glass products which make for 3.3% of the total covered payrolls.

The 1965 minerals yearbook gave \$11,483,000 as the value of nickel, sand and gravel, stone and mercury. If we add \$34,000,000 for nickel we get about \$45,000,000.

The 1967 figure was \$9,929,000 plus about \$34,000,000 for nickel which is

about \$44,000,000---suggesting a fairly constant trend.

It has been estimated 15 years to 25 years at the present rate of production may be expected from the nickel mine.

The reserves at Elkton have been reported to be large at \$500 a flask. At \$400 they are less and at a lesser price naturally they would be less.

On the 1st of January 1900, the first of the new year, the weather was very fine and the sun shone brightly. The people were all very happy and were out in the streets, many of them wearing new clothes. The children were playing in the parks and the old people were sitting on the benches, all enjoying the day.

The first of the new year is a very important day for many people. It is a day when they look back on the old year and think of all the things that have happened. They also think of the things that they want to do in the new year. It is a day of hope and of new beginnings.

The first of the new year is a day when people are full of hope and of new beginnings.

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Roseburg has the Regional Office of the Oregon State Game Commission, which includes Coos, Douglas, Curry, Josephine, and Jackson Counties. There are three hatcheries, two rearing ponds, and five fish management installations within the County.

The 1969-70 Biennial Report of the Game Commission releases figures on a statewide basis only. License sales information, as computed from the sheet following this page, indicates the below statistics:

<u>Type of License</u>	<u>Percent Increase 1968 - 1969</u>
Resident Angler	7.5%
Non-resident Angler	6.5%
Ten-day Angler	16.9%
Daily Angler - 3 days	25.7%
Salmon Angler Tags	4.1%

By contrast, big game licenses declined 7% in the same period. The daily licenses will be largely salmon charter boat fishermen, so the 25% increase is significant in this County.

Salmon Harbor at Winchester Bay, the mouth of the Umpqua River, is the major project of the Douglas County Park Department. This is one of the Pacific Coast's outstanding sports fisheries, and in the past two seasons has led other Oregon sports developments in the total number of salmon landed by sports anglers. Approximately 60,000 angler trips were made in the 1970 season, with a take of roughly half a million pounds of salmon. A recent study concerning valuation of the project to the area and the State of Oregon placed the return in excess of \$6 million dollars. The Lower Umpqua area was closed to commercial fishing in 1949, and at present the recreational demand has crowded out the commercial fishing fleet. However, present expansion of moorage and waterways is designed to increase commercial use. (From a News-Review article appearing January 9, 1971.)

These figures indicate the significant contribution the Umpqua watershed makes to the anadromous fishery of the Oregon Coast. The spawning and rearing capacity of the associated streams is very closely associated with the management of the adjacent lands. As mentioned in the Water Resources portion, 16% of the produced water run off comes from BLM lands. More detailed drainage studies are being developed. BLM frontage on perennial streams important to both resident and anadromous fish has not been analyzed for this report.

Fishery production of the North Umpqua River is near or at an optimum best level of fish production, with an adequate stability of water flow and water quality. The South Umpqua by comparison can support only

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Daily Angler - 3 days	22.7%
Salmon Angler Tags	4.1%

By contrast, big game licenses declined 7% in the same period. The daily licenses will be largely salmon charter boat fishermen, so the 22% increase is significant in this County.

Salmon Harbor at Winchester Bay, the mouth of the Umpqua River, is the major project of the Douglas County Park Department. This is one of the Pacific Coast's outstanding sports fisheries, and in the past two seasons has led other Oregon sports developments in the total number of salmon landed by sports anglers. Approximately 60,000 angler trips were made in the 1970 season, with a take of roughly half a million pounds of salmon. A recent study concerning valuation of the project to the area and the State of Oregon placed the return in excess of \$6 million dollars. The Lower Umpqua area was closed to commercial fishing in 1949, and at present the recreational demand has crowded out the commercial fishing fleet. However, present expansion of moorage and waterways is designed to increase commercial use. (From a News-Review article appearing January 9, 1971.)

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Fishery production of the North Umpqua River is near or at an optimum past level of fish production, with an adequate stability of water flow and water quality. The South Umpqua by comparison can support only

winter run anadromous fish during periods of high run off water. The proposed dams on the South Umpqua River consider as one of their dominant benefits the improved fishery potential by maintaining summer flows suitable in volume and temperature to support resident and anadromous trout and salmon.

	1968		1969	
	Sales	Value	Sales	Value
Resident Combination	134,342	\$1,210,698.00	133,369	\$1,233,690.00
Winter Combination	2,286	2,286.00	2,230	2,230.00
Spring Combination	7,195	7,195.00	7,266	7,266.00
Summer Combination	4,288	4,288.00	4,055	4,055.00
Resident Angler	208,158	1,458,948.00	221,573	1,343,838.00
Winter Angler	2,136	1,078.00	2,081	1,040.50
Spring Angler	1,187	393.50	1,108	358.00
Summer Angler	2,503	1,250.00	2,851	1,425.50
Resident Hunter	47,952	91,803.00	49,087	96,174.00
Winter Hunter	4,358	128,774.00	4,117	138,642.00
Spring Hunter	24,308	170,347.00	22,621	168,547.00
Summer Hunter	157,886	230,742.00	160,603	240,908.50
Resident Angler - One Day	22,777	68,211.00	26,874	80,927.00
Resident Angler - Two Days	3,330	38,345.00	10,223	48,257.50
Resident Angler - Three Days	2,786	18,596.00	2,825	17,150.00
Resident Hunter	193,686	782,752.00	182,015	910,075.00
Winter Hunter	244	128.00	204	102.00
Spring Hunter	189	79.50	161	80.50
Summer Hunter	181	90.50	212	116.00
Resident Hunter	3,283	48,382.00	3,708	11,816.00
Resident Hunter	4,739	160,502.00	3,382	180,580.00
Resident Angler (B) Ind-Free	287	-	271	-
Per. of Lost License	9,821	4,910.50	9,681	4,990.50
Ind. Dupl. License (Free)	436	-	384	-
WINTER-SALE-SUMMER SALES	555,439	24,198,461.00	578,097	24,638,650.00
Special Six Tags	2,748	4,863.00	2,704	4,780.00
Resident Six Tags	53,197	482,827.50	52,732	527,320.00
Resident Six Tags	860	30,100.00	993	35,825.00
Resident Deer Tags	300,328	300,328.00	274,237	336,474.00
Resident Deer Tags	2,812	42,180.00	3,073	46,095.00
Controlled Area Deer Tags	7,033	35,263.00	-	-
Resident Tags	746	3,930.00	842	4,210.00
Deer Tags	6	60.00	-	-
Deer Tags	6	60.00	6	60.00
Deer Tags	-	-	239	478.00
Replacement-Deer Permits	30	15.00	-	-
Replacement-Deer Permits	136	68.00	-	-
Ind. Dual. Tags-Permits	2,162	-	1,801	-
WINTER-SALE-SUMMER SALES	387,087	\$ 907,216.50	350,789	\$1,276,322.00
Winter Angler Licenses	284,213	\$ 284,213.00	295,814	\$ 295,814.00
Spring Salmon Anglers	1,705	-	1,774	-
WINTER-SALE-SALMON	285,917	\$ 284,213.00	297,588	\$ 295,814.00
WINTER-SALE-SUMMER	2,223,547	\$3,388,670.50	1,386,370	\$6,212,891.00

From: Biennial Report - 1968-70
Oregon State Game Commission

OREGON STATE GAME COMMISSION

LICENSE SALES

Type of License:	1968		1969		Increase
	Sales	Value	Sales	Value	
Resident Combination	134,522	\$1,210,698.00	133,369	\$1,333,690.00	
Pioneer Combination	9,988	9,988.00	9,250	9,250.00	
Veteran Combination	7,195	7,195.00	7,266	7,266.00	
Old Age Combination	4,888	4,888.00	6,055	6,055.00	
Resident Angler	208,158	1,248,948.00	223,873	1,343,238.00	7.5
Pioneer Angler	2,158	1,079.00	2,081	1,040.50	
Veteran Angler	1,187	593.50	1,108	554.00	
Old Age Angler	2,500	1,250.00	2,851	1,425.50	
Juvenile Angler	47,252	94,504.00	49,087	98,174.00	
Nonresident Angler	8,558	128,370.00	9,113	136,695.00	6.5
Ten-Day Angler	24,306	170,142.00	28,421	198,947.00	16.9
Daily Angler - One Day	153,828	230,742.00	160,603	240,904.50	
Daily Angler - Two Days	22,737	68,211.00	26,974	80,922.00	
Daily Angler - Three Days	8,530	38,385.00	10,723	48,253.50	25.7
Daily Angler - Four Days	2,766	16,596.00	2,855	17,130.00	
Resident Hunter	195,688	782,752.00	182,015	910,075.00	
Pioneer Hunter	244	122.00	204	102.00	
Veteran Hunter	159	79.50	161	80.50	
Old Age Hunter	181	90.50	232	116.00	
Juvenile Hunter	5,291	10,582.00	5,708	11,416.00	
Nonresident Hunter	4,759	166,565.00	5,388	188,580.00	
Resident Angler (Blind-Free)	267	-	271	-	
Cert. of Lost License	9,821	4,910.50	9,881	4,940.50	
Misc. Dupl. Licenses (Free)	456	-	584	-	
NUMBER-VALUE: LICENSE SALES	855,439	\$4,196,691.00	878,073	\$4,638,855.00	
Special Elk Tags	2,746	6,865.00	2,704	6,760.00	
Resident Elk Tags	65,177	488,827.50	62,732	627,320.00	
Nonresident Elk Tags	860	30,100.00	995	34,825.00	
Resident Deer Tags	300,326	300,326.00	278,237	556,474.00	
Nonresident Deer Tags	2,812	42,180.00	3,073	46,095.00	
Controlled Area Deer Tags	7,053	35,265.00	-	-	
Antelope Tags	786	3,930.00	842	4,210.00	
Goat Tags	8	80.00	-	-	
Sheep Tags	6	60.00	6	60.00	
Turkey Tags	-	-	239	478.00	
Replacements-Elk Permits	30	15.00	-	-	
Replacements-Deer Permits	136	68.00	-	-	
Misc. Dupl. Tags-Permits	2,147	-	1,881	-	
NUMBER-VALUE: TAG SALES	382,087	\$ 907,716.50	350,709	\$1,276,222.00	
Salmon Angler Licenses	284,213	\$ 284,213.00	295,814	\$ 295,814.00	4.1
Duplicate Salmon Anglers	1,804	-	1,774	-	
NUMBER-VALUE: SALMON	286,017	\$ 284,213.00	297,588	\$ 295,814.00	
GROSS SALES-VALUE	1,523,543	\$5,388,620.50	1,526,370	\$6,210,891.00	

From: Biennial Report - 1969-70
Oregon State Game Commission

(more statistics on reverse side)

From the FY170 Annual Report - Game Division

349,651 hunting licenses

281,285 deer tags — 66,406 elk tags

1,917,000 big game hunter days

1,305,000 hunter days - upland game & water fowl

1968 was a record year, and in 1969 there was a 29% drop in recreation days, a 79% drop in deer tag sales. Deer harvest in 1969 the lowest since 1952, 59% decline in elk tags from a record year of 1968.

A comparison study of the receipts from the five overnight camping areas maintained by Douglas County Park Department.

	<u>1968</u>	<u>1969</u>	<u>Ann.</u> <u>Inc.</u>	<u>1970</u>	
PASS CREEK PARK					
<i>40 miles north of Roseburg on I 5</i> Campers (vehicles)	1147	1424	24%	1549	Up 8%
Californians	57%	62%		52%	
Oregonians	9	10		11	
Others	33	29		27	
AMACHER PARK					
<i>Winchester</i> Campers (vehicles)	1302	1581	21%	1642	Up 3%
Californians	57%	61%		52%	
Oregonians	16	15		12	
Others	27	24		36	
STANTON PARK					
<i>20 miles South of Roseburg on I 5</i> Campers (vehicles)	2558	2609	2%	3096	Up 13%
Californians	62%	65%		59%	
Oregonians	11	10		13	
Others	27	25		28	
WHISTLER'S BEND PARK					
<i>15 miles east on N. Umpqua River</i> Campers (vehicles)	640	1113	74%	1221	Up 9%
Californians	47%	46%		37%	
Oregonians	37	41		51	
Others	16	13		12	
WINDY COVE PARK					
<i>Salmon Harbor</i> Campers (vehicles)	4438	5667	28%	4955	Down 14%
Californians	28%	27%		26%	
Oregonians	56	59		56	
Others	16	14		18	

Total Campers Vehicles
12,503

The overall increase was .04%. Windy Cove was down because there was no "overflow area" used this season.

$$\frac{1221}{12,503} = 9.8\%$$

$$\frac{1750}{51,950} = 3.3\%$$

$$\frac{4955}{12,503} = 39.6\%$$

Revenue report for overnight camping areas maintained by Douglas County
Park Department. (Fiscal years)

	<u>'65-'66</u>	<u>'66-'67</u>	<u>'67-'68</u>	<u>'68-'69</u>	<u>'69-'70</u>
Amacher Park			\$2,957.28	\$3,969.92	\$6,569.00
Windy Cove			6,336.50	11,076.00	22,143.00
Whistler's Bend	\$725.00	\$748.00	876.00	1,048.00	1,540.20
Pass Creek	842.54	1,601.62	2,881.00	2,746.00	4,865.00
Stanton Park	3,791.10	4,085.00	5,815.00	6,538.00	9,425.50
TOTALS	\$5,358.64	\$6,434.62	\$18,865.78	\$25,377.92	\$44,542.70

44,542.70

12,503

Camping Revenue for June, July and August

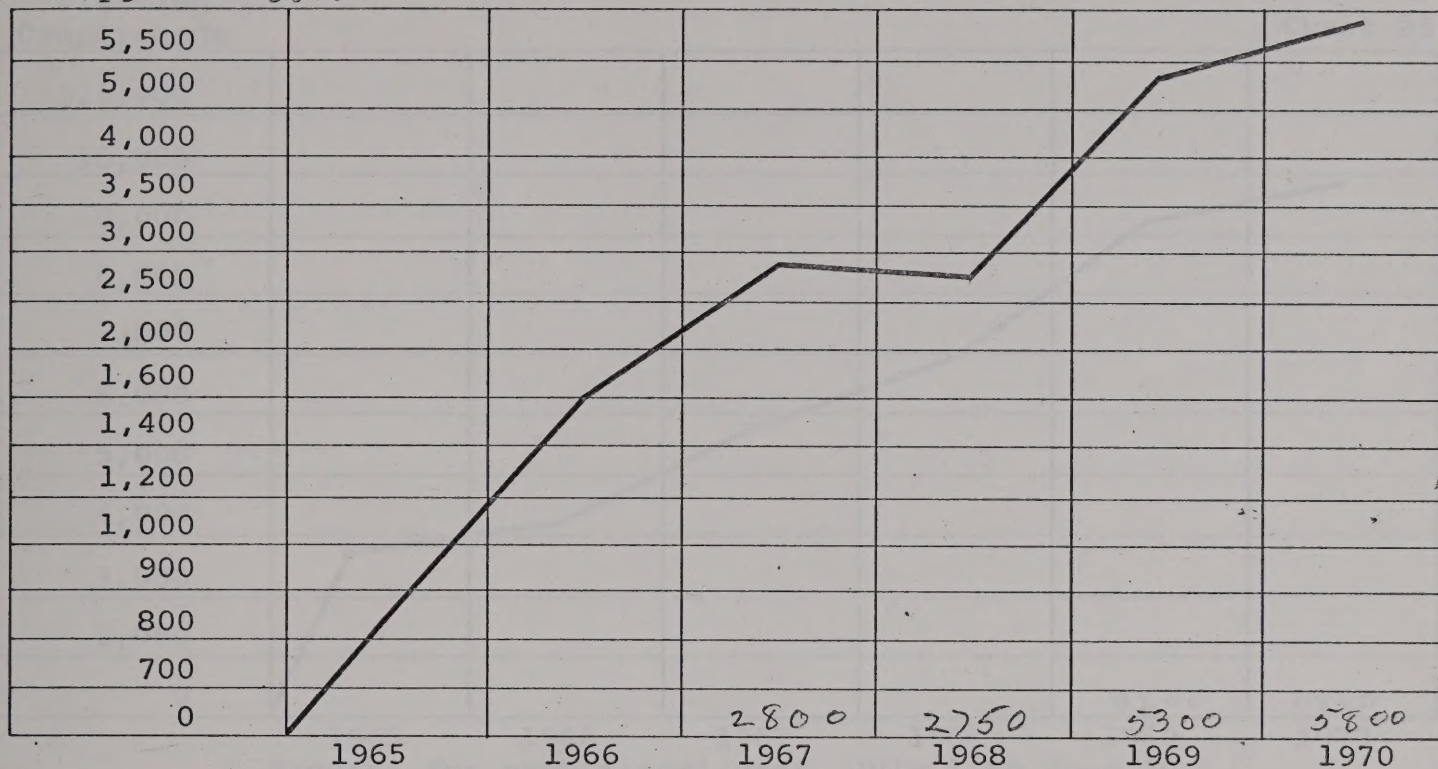
	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
Amacher Park Opened July 1967	\$ 313.50	\$2,566.00	\$ 4,471.00	\$ 4,674.00
Windy Cove Opened July 13, 1967	3,496.50	6,057.00	15,440.50	15,232.00
Whistler's Bend	580.00	699.00	1,176.00	1,301.00
Pass Creek	1,782.00	2,065.00	3,216.00	3,714.00
Stanton Park	4,067.00	4,373.00	6,729.00	7,588.00
 TOTAL	 \$10,239.00	 \$15,760.00	 \$31,032.50	 \$32,509.00

PASS CREEK

Located 40 miles north of
Roseburg on I-5 at Curtin Interchange

Persons
Visiting
Campgrounds 6000

Chart #3



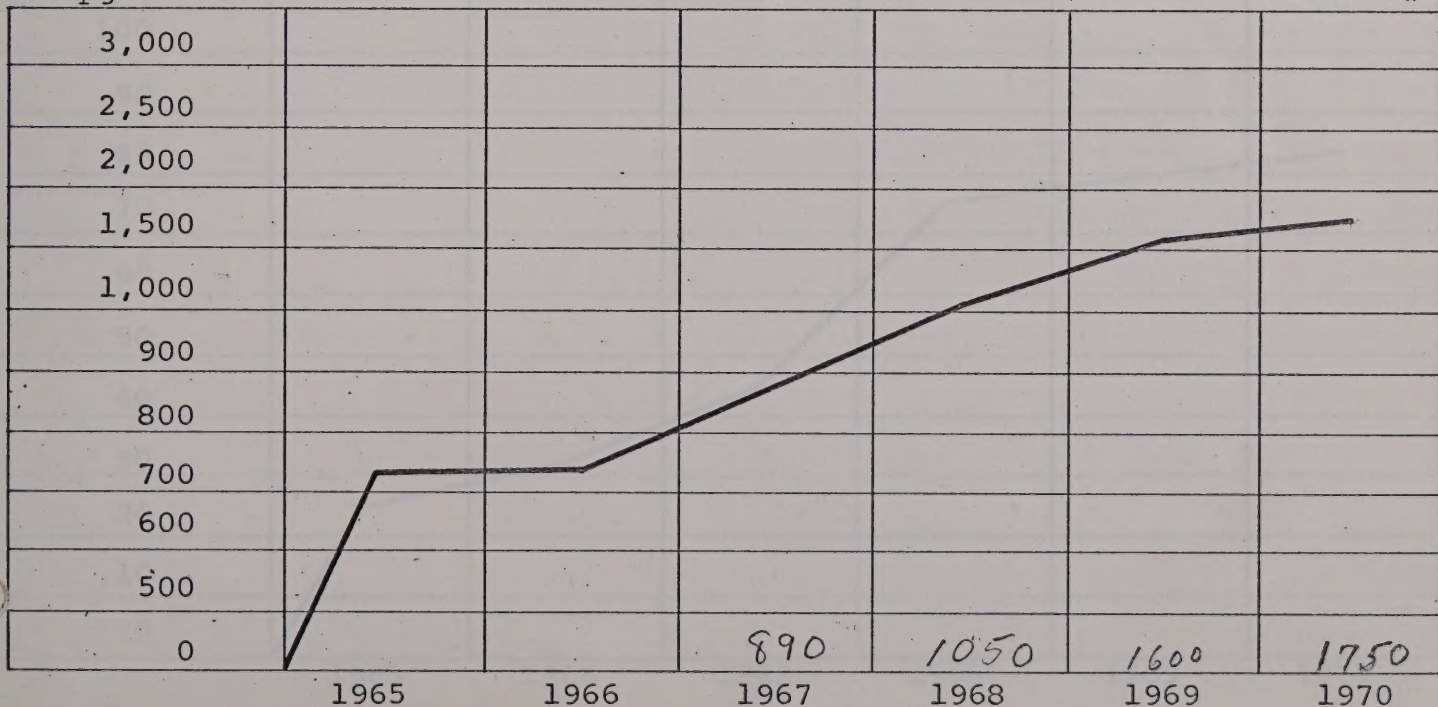
Figures for each fiscal year, July 1 to June 30.

WHISTLER'S BEND PARK

Located 15 miles east of Roseburg
off N. Umpqua Highway

Persons
Visiting
Campgrounds

Chart #4



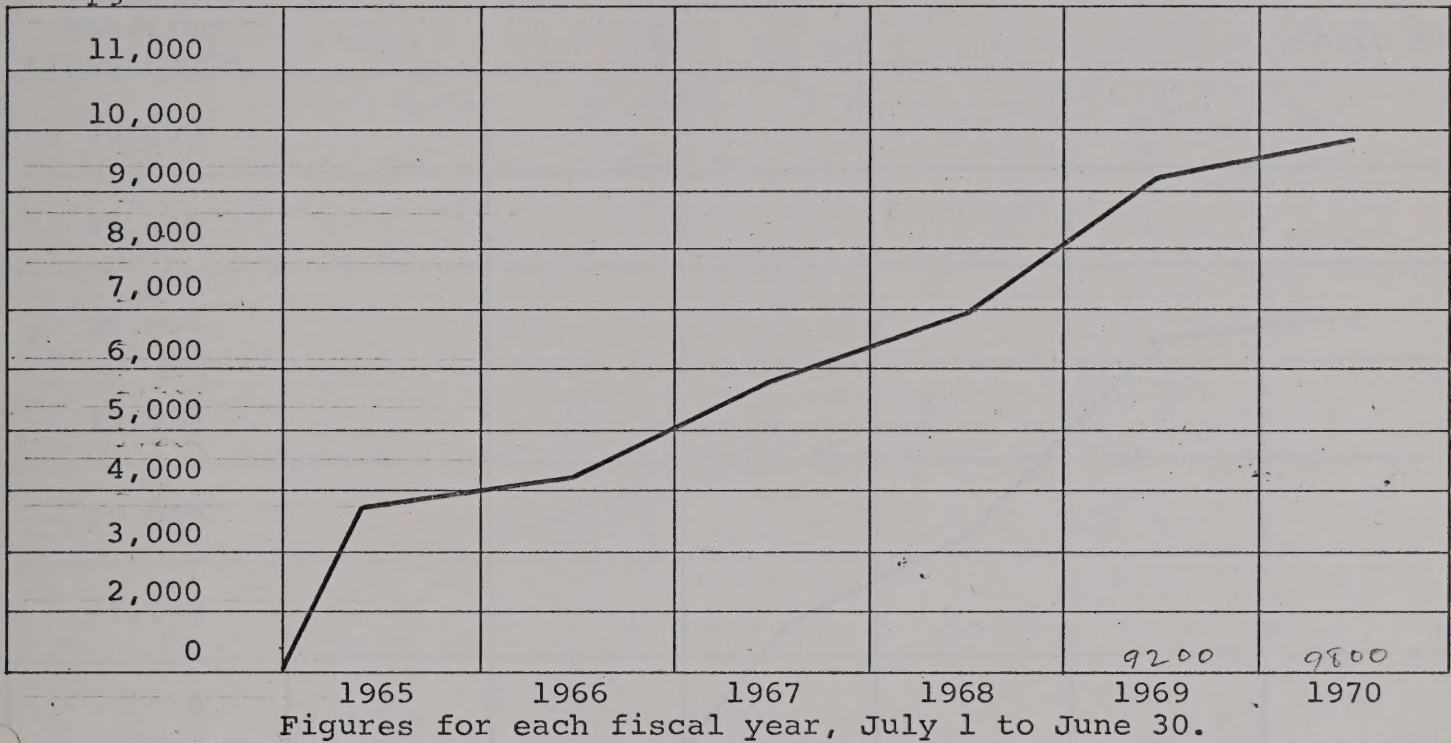
Figures for each fiscal year, July 1 to June 30.

STANTON PARK

Located 20 miles south of Roseburg off I-5 at Canyonville

Persons
Visiting
Campgrounds

Chart #5

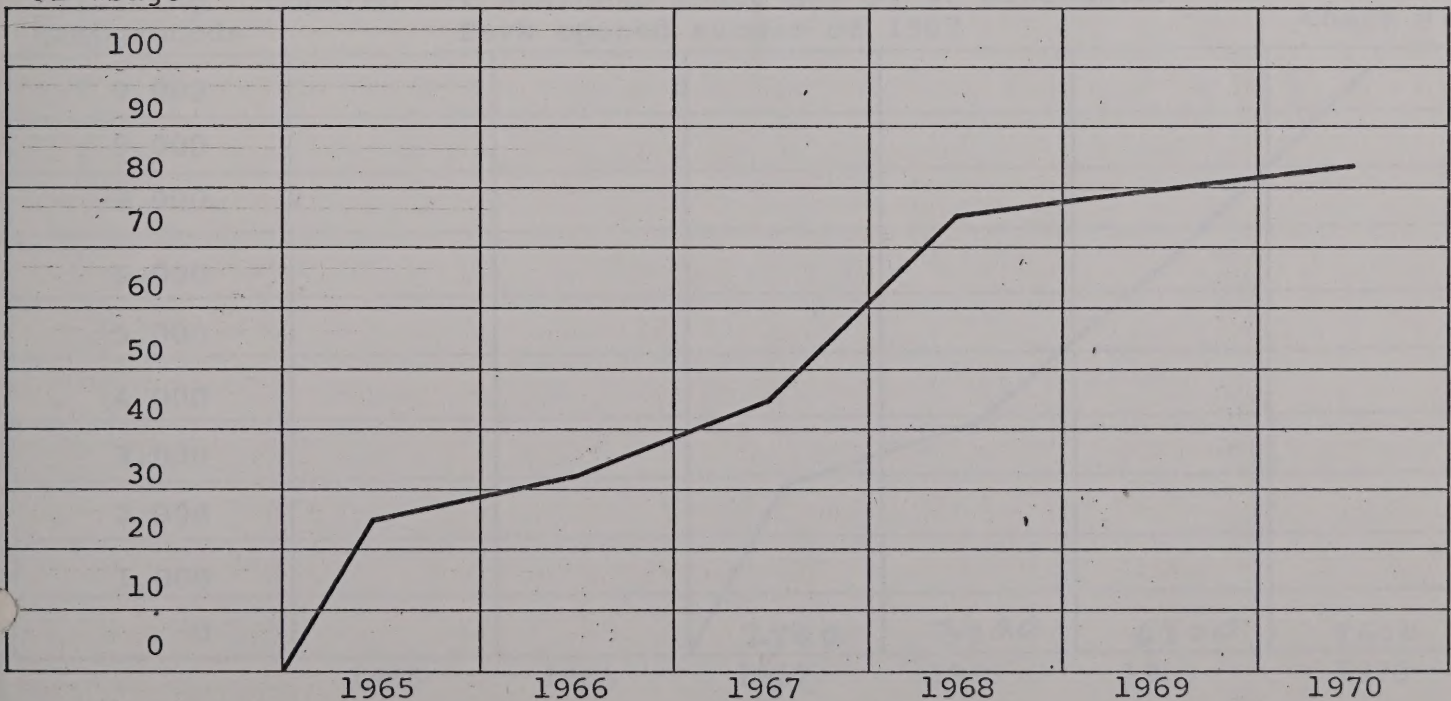


DAY USE

Includes all parks in Douglas County

Percentile
of usage

Chart #6

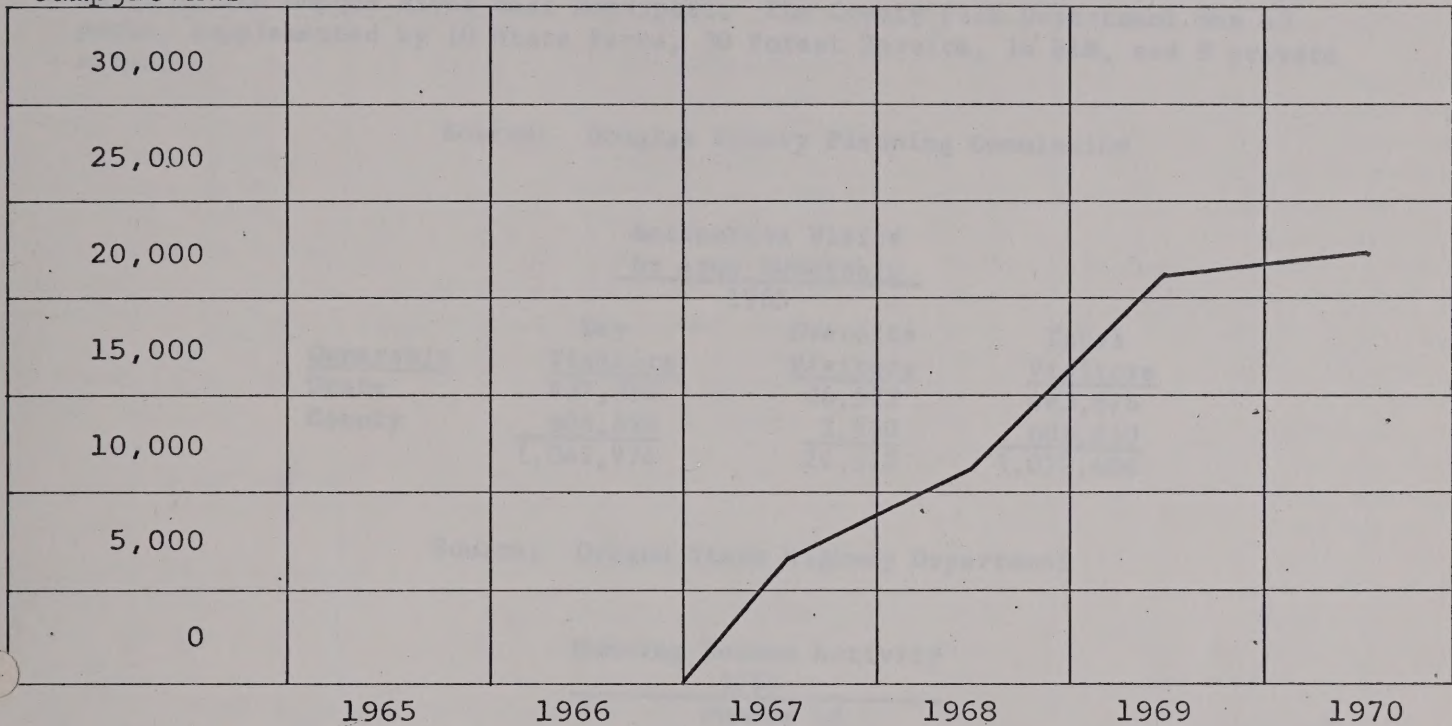


WINDY COVE PARK

Located adjacent to Salmon Harbor at Winchester Bay
Park opened summer of 1967

Persons
Visiting
Campgrounds

Chart #1



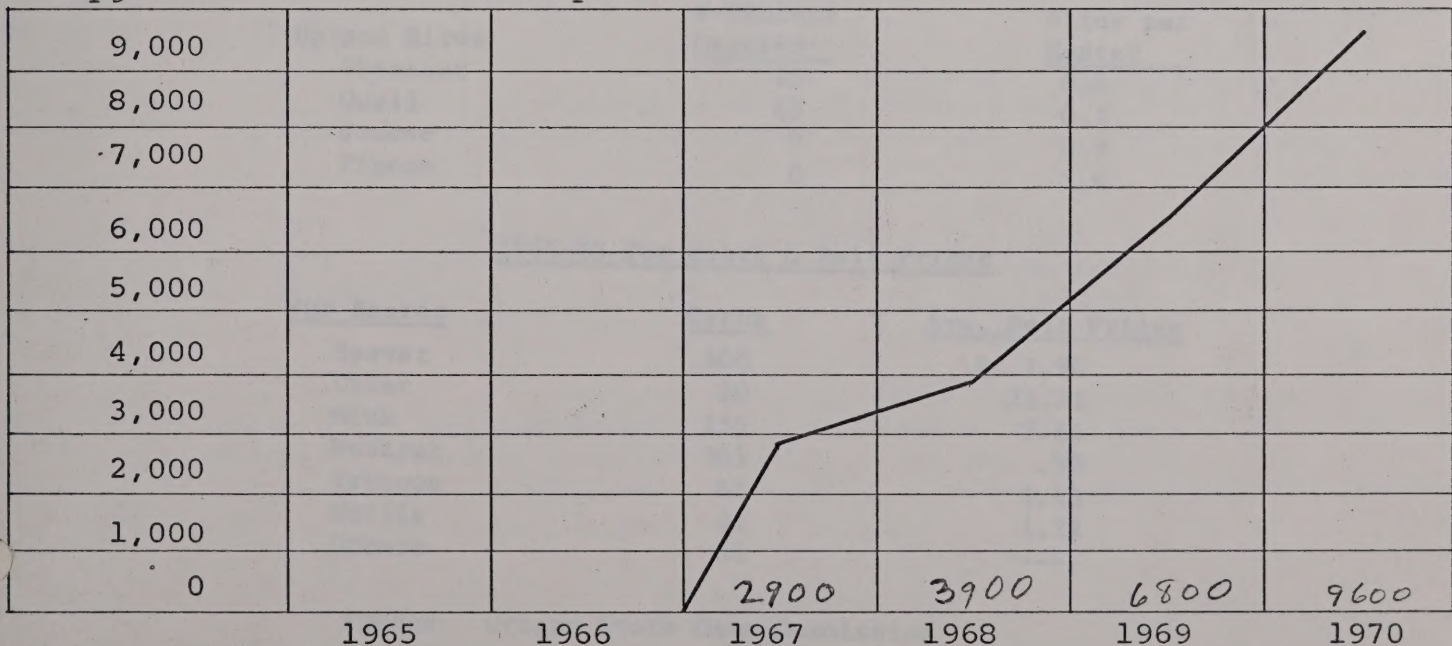
Figures for each fiscal year, July 1 to June 30.

AMACHER PARK

Located off Business Route Hwy 99 at Winchester
Park opened summer of 1967

Persons
Visiting
Campgrounds

Chart #2



Figures for each fiscal year, July 1 to June 30.

DOUGLAS COUNTY

RECREATION

A combination of the Cascade mountains and Coast range, rivers and smaller streams, Diamond and other lakes, and 29 miles of seashores offer considerable recreational opportunity. Salmon fishing and charter boat service are at the mouth of the Umpqua River near Reedsport. The County Park Department has 43 parks, supplemented by 10 State Parks, 30 Forest Service, 14 BLM, and 8 private sites.

Source: Douglas County Planning Commission

<u>Ownership</u>	<u>Recreation Visits by Area Ownership</u>		<u>Total Visitors</u>
	<u>Day Visitors</u>	<u>Overnite Visitors</u>	
State	437,354	26,522	463,876
County	605,620	2,990	608,610
	1,042,974	29,512	1,072,486

Source: Oregon State Highway Department

<u>Hunting Season Activity 1964</u>		
<u>Type Season</u>	<u>Number of Hunters</u>	<u>Kill</u>
Big Game		
Emergency - Elk	20	23
Black-tailed Deer	5,888	1,596
Roosevelt Elk	1,083	241
Upland Birds	<u># Hunters Checked</u>	<u>Birds per Hunter</u>
Pheasant	65	0.4
Quail	65	0.1
Grouse	9	0.9
Pigeon	8	5.6

1964-65 Fur Catch & Pelt Prices

<u>Fur Bearer</u>	<u>Catch</u>	<u>Ave. Pelt Prices</u>
Beaver	606	\$ 7.94
Otter	20	21.71
Mink	155	7.64
Muskrat	365	.98
Raccoon	65	1.45
Nutria	31	1.22
Others	46	----

Source: Oregon State Game Commission

DOUGLAS COUNTY

MAJOR OUTDOOR RECREATION FACILITIES

Improved Parks	Acreage	Other County Parks	Acreage
Fair Oaks	3.37	Britt Nichols	123.25
Mack Brown	3.37	James Wood	1.90
Anna Drain	1.70	Ada	14.00
Winchester Bay		Otter Slough	30.00
(Salmon Harbor)	90.00	Hedden	0.50
Dave Busenbark	28.60	Steamboat Falls	15.41
Richard G. Barker Memorial	10.00	Sparrow	14.00
Singleton	3.50	Whistler's Bend	160.00
Ziolkouski Beach	4.50	North Umpqua Recreation Land	428.00
Winston-Dillard	7.25		
Barton	27.30	Total Other	787.06
Canyonville	12.00		
North Myrtle	19.00		
Gardiner Dock	0.25		
Smith Springs	10.00		
V. T. Jackson	3.00	<u>Recreational Roads</u>	
Stearns	3.50		
Cable Crossing	0.50	Cleveland Rapids Road	1.50
Lone Rock Wayside	0.50	Lawson's Bar Road	3.00
Winchester River Access	2.00		
Hestness Landing	1.09		
Angler's Acres	1.50		
		Recreational Reserve Lands owned or controlled--approximately 2,000 acres.	
Total Improved	232.93		

FOREST SERVICE

National Forest Park Areas

12 camp and recreation areas totaling 85 acres, of which three of the most popular are:

Name	Location
Tahkenitch	7 miles N. Reedsport
Diamond Lake	20 miles N. Crater Lake
Carter Lake	9 miles S. Florence
2 Winter Sports Areas	1 Resvoir
2 Resorts and Dude Ranches	3 Dedicated Areas
1 Organized Camp	200 Miles of Roadside, Trailside,
70 Summer Homes	and Water Front

(Continued)

DOUGLAS COUNTY

MAJOR OUTDOOR RECREATION FACILITIES (Continued)

Name	Location	Acreage
<u>STATE PARKS:</u>		
Bolon Island	City of Reedsport	11.41
Umpqua Lighthouse	5 mi. S. Reedsport	2,747.40
Umpqua Wayside	9 mi. E. Reedsport	31.22
Elk Creek Tunnel	3 mi. E. Elkton	200.00
Hutchinson	10 mi. S. E. Elkton	6.00
Pass Creek	5 mi. S. Cottage Grove	15.00
Umpqua-Myrtle Preserve	11 mi. E. Scottsburg	4.85
Susan Creek	29 mi. N. E. Roseburg	78.96
Roseburg	City of Roseburg	16.34
Canyon Creek*	3 mi. S. Canyonville	80.00
Stage Coach	18 mi. S. Canyonville	80.00
Camas Mountain	3 mi. E. Camas Valley	160.00
Total State Parks		3,431.18
<u>ROADSIDE REST AREAS:</u>		
Umpqua River	13 mi. E. Reedsport	0.50
Cabin Creek	2 mi. N. Oakland	2.00
Cow Creek	24 mi. S. Myrtle Creek	5.00
Canyon Creek	3.6 mi. S. Canyonville	1.50
Packard Creek	5.7 mi. S. Canyonville	3.00
Total Roadside Rest Areas		12.00

* Includes Canyon Creek Roadside Rest Area.

HISTORIC SITES-MARKERS:

Scottsburg	Site of Lowertown, wiped out in flood of 1861.
Canyon Creek	Route of Hudson Bay travelers to California.
Mile 28.17	Between Elkton and Scottsburg.

Source: Douglas County Planning Commission, U. S. Forest Service and Oregon State Highway Department.

TROUT ANGLING EFFORT AND CATCH
FOR THE LOWER UMPQUA DISTRICT
1964

Lakes and Streams	Number Anglers	Number by Species				Total Fish	Fish Per Angler	Fish Per Hour
		Ct	Rb	Co	K			
<u>Lakes</u>								
Eel	253	748			22	770	3.04	0.66
Loon	216	313	240			553	2.56	0.91
Tenmile	85	69	12	9		90	1.06	0.28
Marie	14	113				113	8.07	4.04
LAKE TOTALS & AVERAGES	568	1,243	252	9	22	1,526	2.69	0.72
<u>Streams</u>								
Smith River	37	144				144	3.89	1.00
Vincent Creek	10	26				26	2.60	0.50
West Fork Smith River	3	20				20	6.67	4.00
STREAM TOTALS & AVERAGES	50	190				190	3.80	0.94

The highest figures ever recorded at Diamond Lake for both angler pressure and success were obtained in 1964. A total of 115,532 angler trips was made to catch 416,091 trout. Only 9.1 percent of the anglers failed to catch any fish. The average weight was 0.82 pounds per fish, and the weight of the total harvest was 342,028 pounds. For the second consecutive year, campground use at Diamond Lake exceeded 100,000 people.

Rainbow from the 1963 fingerling plants in North Umpqua impoundments contributed less than 20 percent for the 1964 season. Anglers at the reservoirs had an average catch of just under one fish per trip. The catch rate was 0.25 fish per hour.

INCIDENCE OF BLM RESOURCES

A. Timber

Present Situation

Statistical summary of log production in Oregon and also in Douglas County (MBF)

	Log Production	Year	Percent and Definition	Sold & Not Cut
Oregon	9,128,382	1969		
Pvt. - Statewide	4,143,778	1969	45.4% Statewide	
Western Oregon	7,070,871	1969	D.Fir Region	
Eastern Oregon	2,057,511	1969		
Remainder	(222,326	1969)	3.5% Statewide	
	(91,942	1969)		
Douglas County	1,671,192	1969	18% W. Ore. cut	
BLM - Statewide	1,206,019	1969	13.1% Statewide	
BLM - Roseburg	201,803	1969	Cut - 17% Statewide	
BLM - Roseburg	205,569	1970	Cut	403,000M (1-1-71)
BLM - Roseburg	253,882	1969	Sold FY 15.2%	
BLM - Roseburg	300,499	1970	Sold FY	
USFS - Statewide	3,464,317	1969	38% Statewide	
USFS - Douglas Co.	401,946	1969	Cut	
USFS - Douglas Co.	433,702	1970	Cut	907,712M (1-1-71)
BLM - Douglas Co.	494,486	1969	Sold 29.6	
BLM - Douglas Co.	483,864	1970	Sold	

The above statewide figures appeared in a News-Review article in June 1970.

The 1969 cut is 6 percent below 1968, which was the highest since 1952.

Douglas County is the top timber producer in the state for the fifth

straight year. Lane County has remained second with a harvest of

1,450,345 M bd.ft., and Linn County third with 668,255 M bd.ft. Since

1950 Douglas County has produced 15 - 20 percent of the total lumber

output of Western Oregon.

The forest industries in Douglas County employ over 37 percent of the total work force, and data indicates that over 75 percent of all jobs in the county are directly dependent on the forest industries.

were 23.5% greater than the export volume of the same period in 1967.

Raw material supplies from private lands have declined from 1.6 billion board feet in 1955, to about 800 million in 1968. This represents an average annual decrease, from the 1955 level, of 2 percent per year.

It is felt by some that the present cut of private timber is declining at 4 - 5 percent annually, although no established data has been gathered for this supposition.

The emphasis on more technology and utilization is increasing. Utilization by stockpiling (land fill) is not the answer, nor is incineration.² New chippers and canters, logging techniques, increased uses of sawdust and chips, manufactured modular homes, and secondary processing, are all future improvements that are, and will be realized. Bark utilization and merchandising is also gaining.

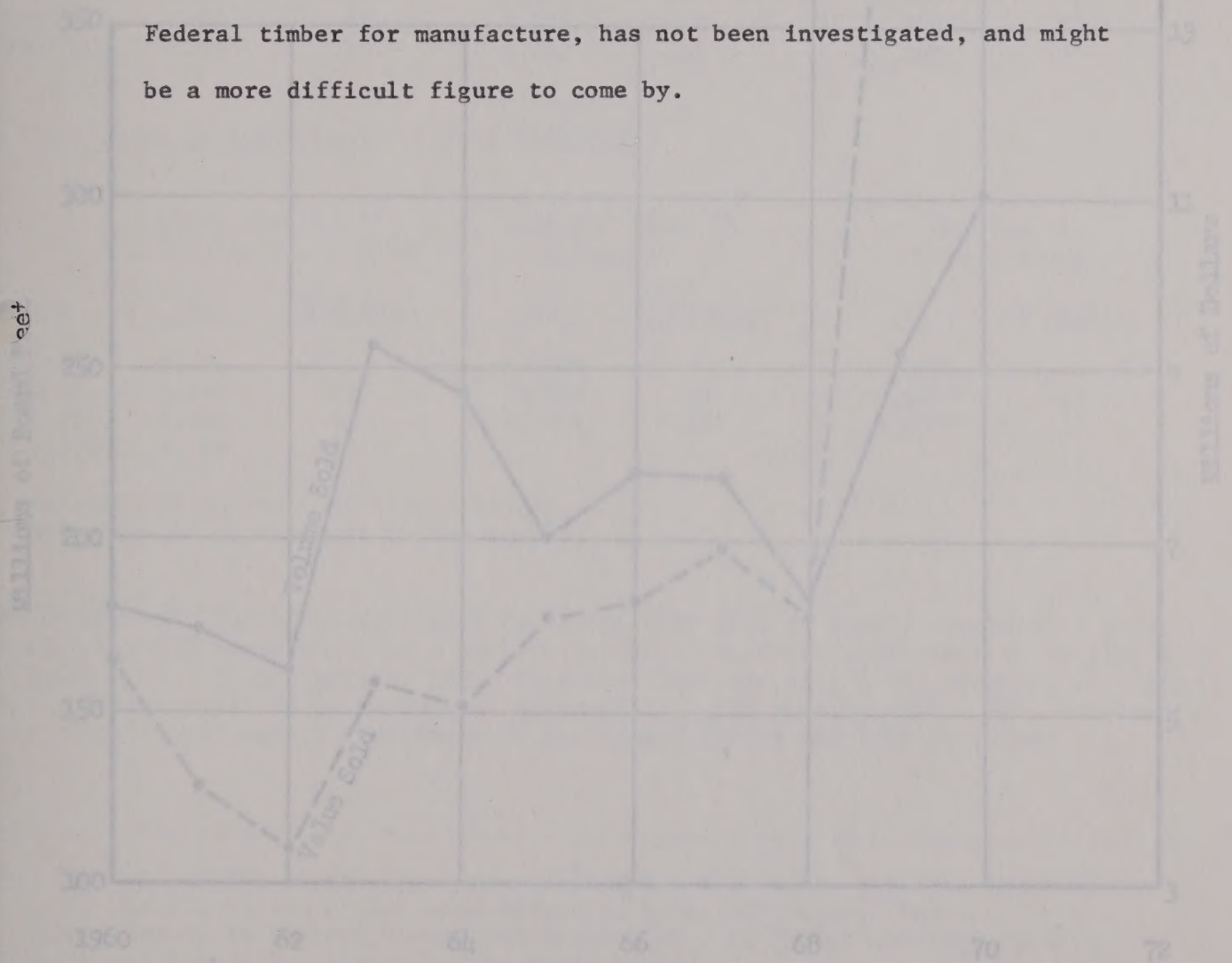
While the market has been depressed during 1970 and mill closures are numerous in the industry, the Roseburg area seems to be holding a fairly stable position in the Douglas-fir region of the northwest.

The sold but uncut total volume of 1,310,712 M bd.ft. has considerable impact on income and employment at this point in time in Douglas County, especially the Roseburg area, with dropping interest rates and probably improving market for homebuilding, a substantial boost to the economy could be quickly felt.

VOLUME AND VALUE OF TIMBER SOLD BY FISCAL YEAR

ROSEBURG DISTRICT

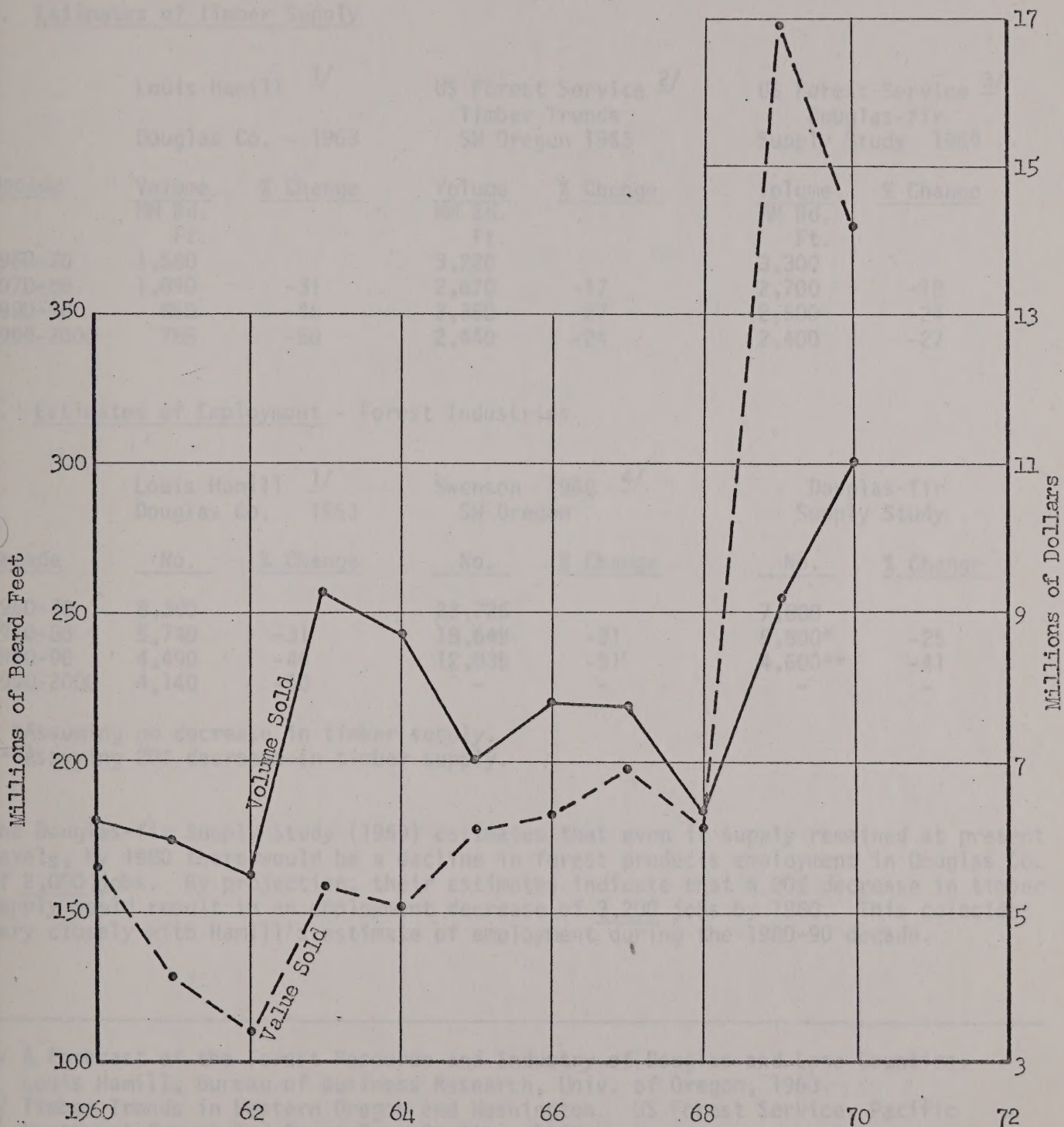
In industry news, softwood log exports for the third quarter of 1970, were 23.5% greater than the export volume of the same period in 1969. In Oregon alone, there was a 45.1 percent increase over the second quarter of 1970. It is felt that the quantity of logs originating in the Roseburg BLM District, and destined for export, is quite small. The impact of export of private logs that has to be replaced with Federal timber for manufacture, has not been investigated, and might be a more difficult figure to come by.



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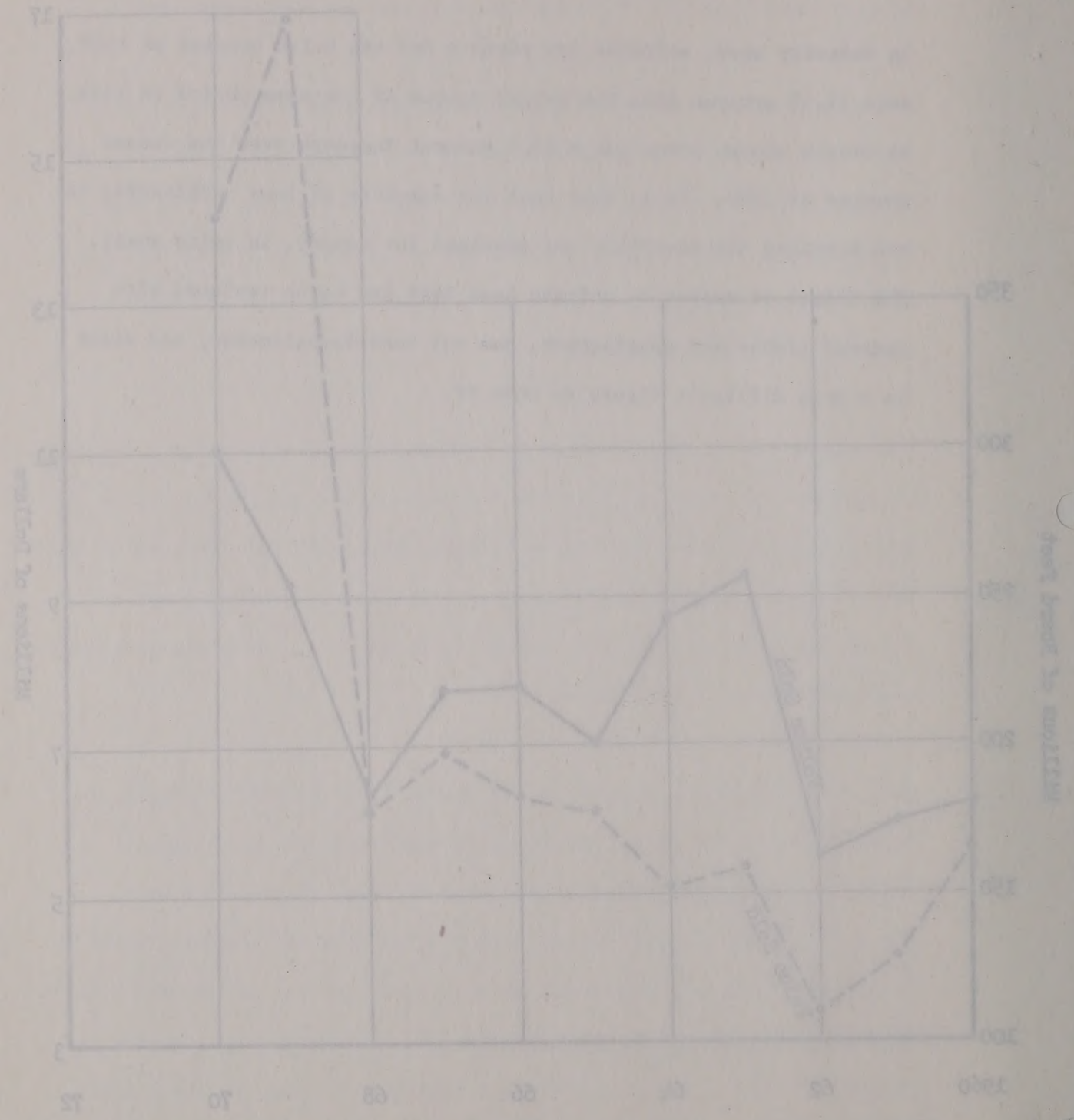
VOLUME AND VALUE OF TIMBER SOLD BY FISCAL YEAR

ROSEBURG DISTRICT



WORKS AND VALUE OF TOWNS SOLD BY FISCAL YEAR

DECEMBER 1910



ECONOMICS OF TIMBER SUPPLY

1. Estimates of Timber Supply

Louis Hamill ^{1/}
Douglas Co. - 1963

US Forest Service ^{2/}
Timber Trends
SW Oregon 1963

US Forest Service ^{3/}
Douglas-fir
Supply Study 1969

<u>Decade</u>	<u>Volume</u> <u>MM Bd.</u> <u>Ft.</u>	<u>% Change</u>	<u>Volume</u> <u>MM Bd.</u> <u>Ft.</u>	<u>% Change</u>	<u>Volume</u> <u>MM Bd.</u> <u>Ft.</u>	<u>% Change</u>
1960-70	1,580		3,220		3,300	
1970-80	1,090	-31	2,670	-17	2,700	-18
1980-90	850	-46	2,350	-27	2,500	-24
1990-2000	785	-50	2,440	-24	2,400	-27

2. Estimates of Employment - Forest Industries

Louis Hamill ^{1/}
Douglas Co. 1963

Swenson 1968 ^{4/}
SW Oregon

Douglas-fir
Supply Study

<u>Decade</u>	<u>No.</u>	<u>% Change</u>	<u>No.</u>	<u>% Change</u>	<u>No.</u>	<u>% Change</u>
1960-70	8,380		23,726		7,800	
1970-80	5,740	-31	18,649	-21	5,800*	-25
1980-90	4,490	-46	12,035	-51	4,600**	-41
1990-2000	4,140	-50	-	-	-	-

*Assuming no decrease in timber supply.

**Assuming 20% decrease in timber supply.

The Douglas-fir Supply Study (1969) estimates that even if supply remained at present levels, by 1980 there would be a decline in forest products employment in Douglas Co. of 2,000 jobs. By projection, their estimates indicate that a 20% decrease in timber supply would result in an employment decrease of 3,200 jobs by 1980. This coincides very closely with Hamill's estimate of employment during the 1980-90 decade.

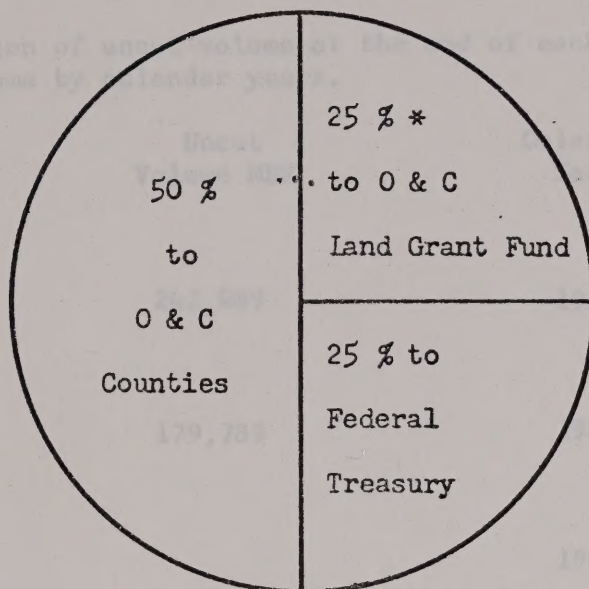
1/ A Forecast of the Forest Resource and Industry of Douglas and Lane Counties. Louis Hamill, Bureau of Business Research, Univ. of Oregon, 1963.

2/ Timber Trends in Western Oregon and Washington. US Forest Service, Pacific Northwest Forest and Range Exp. Station, 1963.

3/ Douglas-fir Supply Study, US Forest Service, Pacific Northwest Forest and Range Experiment Station, 1969.

4/ Federal Forest Policies - Effects on Regional Employment and Income in Southwest Oregon. Washington University, St. Louis, Mo., Working Paper EDA 7, Norman P. Swenson.

REVENUE FROM O & C LANDS



* These funds are contributed by O & C Counties for capital investment in the land.

ANNUAL PAYMENTS TO DOUGLAS COUNTY FROM O & C LANDS

<u>Fiscal Year</u>		<u>Fiscal Year</u>	
1960	\$4,028,529	1965	\$4,938,914
1961	3,629,568	1966	5,171,229
1962	3,866,974	1967	5,478,056
1963	3,774,352	1968	6,431,432
1964	5,216,602	1969	8,072,041
		1970	7,443,542

ROSEBURG DISTRICT

April 9, 1971

Comparison of uncut volume at the end of each 6 month period and the harvested volume by calendar years.

Date	Uncut Volume MBF	Calendar Year	Harvested Volume MBF
June 30, 1965			
Dec. 31, 1965	242,089	1965	211,440
June 30, 1966			
Dec. 31, 1966	179,789	1966	213,214
June 30, 1967			
Dec. 31, 1967		1967	161,689
June 30, 1968	243,000		
Dec. 31, 1968	263,214	1968	200,126
June 30, 1969	243,000		
Dec. 31, 1969	308,247	1969	201,803
June 30, 1970	374,631		
Dec. 31, 1970	403,155	1970	205,569



B. Livestock and Agriculture

Present Situation

In 1969 CY the grazing lease tabulation of District lands is as follows:

<u>No. Permits</u>	<u>Acres</u>	<u>Annual Rental</u>	<u>Cattle & Horses</u>	<u>Sheep & Goats</u>	<u>Est. Actual Use AUMs</u>
43	52,450	\$2,647.22	2300	800	4600

Surveys to determine carrying capacity have never been made.

In 1964, Douglas County had 1922 farms totaling 528,304 acres, averaging 275 acres. Since that time the trend has been, national and local, that farms are fewer in number and larger in size, and the trend will no doubt continue. The County Extension Office presently has the number of farms below 1700 in January 1971.

Douglas County leads the state in sheep production with approximately 105,000 head raised in 1967. Cattle numbered 37,000 head with 2700 dairy breed and 34,300 beef cattle. There is a slight gradual increase in numbers of livestock, but it is not really significant.

The use of woodland pasture can be expected to decline in the future, although there will be some pasture improvement on private lands. Sheep and wool production is expected to maintain an important place in agricultural income of the county.

B. Livestock and Agriculture

Present Situation

In 1959 the grazing land use of District lands is as follows:

<u>No. Farms</u>	<u>Acres</u>	<u>Annual Rental</u>	<u>Cattle & Horses</u>	<u>Sheep & Goats</u>	<u>Est. Actual Use AUMs</u>
43	22,450	\$2,647.22	2300	800	4600

Surveys to determine carrying capacity have never been made.

In 1954, Douglas County had 1923 farms totaling 528,304 acres, averaging

275 acres. Since that time the trend has been, national and local, that

farms are fewer in number and larger in size, and the trend will no

doubt continue. The County Extension Office presently has the number

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The use of woodland pasture can be expected to decline in the future.

Although there will be some pasture improvement on private lands, sheep

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agricultural income of the county.

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

State Oregon

DISTRICT
Office 38-100, Roseburg

Land prices paid by large commercial farming operations, although

not very significant in this area, have gone up very little if any.

Small parcels of land, which is usually the grazing type of cover

and terrain, has almost tripled in value during the last decade. The

influx of people in the market for a few acres of rural land, easily

numbers 2500 per year in the Roseburg District, but the population

gain does not show a comparable net increase.

INSTRUCTIONS

1. Preparation and routing:

a. State Directors forward one copy of each Land Office(s) submission to the Director's Office, Attention: 413 (1100). Except HSG.

b. Oregon report O&C and public lands on separate lines.

Note.-All leases shown in this form except those in Alaska and on the O&C lands in Oregon are issued pursuant to the authority contained in Sec. 15, Act of June 28, 1904 (33 Stat. 251).

Alaska, Act of Mar. 4, 1927 (44 Stat. 1452); O&C, Act of Aug. 28, 1937 (50 Stat. 274).

Source: District grazing lease records.

Footnotes:

1/ These are F.D. portions of the O&C and CB&E leases

43 is the total number of permits in District for C.Y. 1969.

Incidence of BLM Resources

C. Minerals

Nickel is currently being mined at Nickel Mtn., Riddle, Oregon by Hanna Mining Co. The mine is located in T. 30 S., R. 6 W., W.M., Section 17 and the reduction plant at T. 30 S., R. 6 W., W.M., Section 20 & 21. They have patented mining claims under lease as well as unpatented mining claims in T. 30 S., R. 6 W., W.M, Sections 7, 18, 19 & 20. They are mining about a million tons of rock yearly to produce about 30,000,000 lbs. of nickel worth \$1.00 a pound. They have been doing this for years and are expected to continue doing so for many years more. (15 at least).

They employ 475 people and the monies required to do this are being spent in Myrtle Creek and Riddle areas as well as elsewhere in Oregon.

They produce approximately 10% of the U.S. requirement of nickel. Another unrecognized contribution they have made is that the Hanna Mining Co., well assisted in the early stages with heavy infusions and guarantees of Federal money (in excess of \$26,000,000), proved the process of recovering nickel from laterites as economically feasible.

The jet age world needs nickel for high temperature, high pressure alloys and applications. The methods and technology acquired at Riddle are used worldwide on laterites.

This operation will produce a product of between \$600,000,000 and \$800,000,000 in about 25 years. This is "new money" introduced into the national economy.

Another metal may become important to the county's economy and that is copper. It may be economically produced from some former producers and prospects as recent breakthroughs in in-site mining and resin refining methods which require relatively small start-up capital out logs may result in investments in local deposits.

D. Recreation

Present Situation

Bibliography reference #3 (Page 63) places the estimated number of tourist cars in 1968 at 2,696,000, with 2.8 passengers per car, spending an average of 3.30 days in the state, and an average daily expenditure per car of \$24.23, or a total estimated annual expenditure of \$215,645,000. This is an expenditure of \$8.65 per person. The indicated increased visits of tourists is expanded at 3 percent per year. According to a report prepared by the State Highway Department, tourism in Douglas County is presently double the overall state average, and there is no indication that there will be any slowing of this trend (#9).

Inventory of Existing Facilities - 1970

	Tot.#	Acres	Picnic Units		Tent Sites		Trailer Sites		Drink Water
			Parks	No.	Parks	No.	Parks	No.	
Douglas County	51	2000	41	516	4	52	5	101	20
BLM - Roseburg	10	160	10	84	4	22	6	38	9
BLM - Coos Bay	3		3	47			1	83	2
State of Oregon	15	3878	8	116	2	93	1	22	7
USFS-Douglas Co.	52		52	177		* 782		*	10
Pvt. and Misc.	8		8	109	3	17	3	17	5
				1049		184		261	

*The inventory is 782 combination units. Capacity of USFS facilities in Douglas County accommodates 5100 people at any one time. Based on number of units, the Roseburg district furnishes 6% of the outdoor recreation experience.

Douglas County has 29 miles of frontage on the Pacific Ocean. Salmon Harbor at Winchester Bay has been the top sport fishing port on the Oregon coast for the past four seasons, according to the Oregon State Game Commission (#9). The economic impact in the

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Inventory of Existing Facilities - 1970

Tot. \$	Acres	Picnic		Tent		Trailer		Drink
		Units	Parks No.	Units	Parks No.	Sites	Parks No.	Water
31	2000	41	216	4	32	2	101	10
10	180	10	84	4	22	6	38	9
3		3	47			1	83	2
15	3878	8	116	2	93	1	22	7
22		22	117	*	*	*	*	10
8		8	109	3	17	3	17	2
			1049		184		261	

*The inventory is 782 combination units. Capacity of USFS facilities in Douglas County accommodates 2100 people at any one time. Based on number of units, the Roseburg district furnishes 6% of the outdoor recreation experience.

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Reedsport - Winchester Bay area is responsible for adding 6.5 million dollars annually, and the prediction is 12 million dollars annually by 1980. Windy Cove Park, adjacent to Salmon Harbor, accounted for nearly one-third of total camper vehicles in 1967, and was filled to capacity every night until after Labor Day. In 1970 the campground receipts were down 14% because there was no "over flow" area used that season, as compared to 1969.

1970 Campground Statistics - Douglas County Park Department

Comparison of receipts from the five maintained camping areas:

	Camper Vehicle			Total
	Days	68-69	69-70	Persons*
Pass Creek Park	1549	Up 24%	Up 8%	5800
Amacher Park	1642	Up 21%	Up 3%	9600
Stanton Park	3096	Up 2%	Up 13%	9800
Whistlers Bend	1221	Up 74%	Up 9%	1750
Windy Cove	4995	Up 28%	Down 14%	25000
	12503			51950

*Read from graphs (Bib.#9), shown in rear of this portion.

It appeared that fewer Californians were traveling in the state in 1970, but participation is about 60% from that state and 10-15 percent Oregonians using the Interstate 5 campgrounds.

At Windy Cove and Whistlers Bend, which are more fisherman oriented, use by Oregonians is over 50% and Californians about 30%. The reason for the leveling off trend in 1970 is not known at this time.

Day use at all parks in Douglas County is about 80%, and this can be considered as picnicking use. Camping use is considered to

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Comparison of receipts from the five maintained camping areas:

Camper Vehicle Days	68-69	69-70	Personnel*	Total
Pass Creek Park	1349	Up 24%	2800	2800
Amacher Park	1442	Up 21%	9000	9000
Stanton Park	3090	Up 2%	9800	9800
Whistlers Bend	1221	Up 74%	1750	1750
Windy Cove	4995	Up 28%	25000	25000
	12303	Down 14%		21950

*Read from graphs (Bib. 49), shown in rear of this portion. It appeared that fewer Californians were traveling in the state in 1970, but participation is about 60% from that state and 10-15 per-

cent Oregonians using the Interstate 5 campgrounds.

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can be considered as picnicking use. Camping use is considered to

be 20%, with almost 3% using trailers, according to State Highway Department statistics.

BLM Campground Use - June through Labor Day, 1969

	Av. Daily	Total		Pick-up				
	Use	Visitor.	Camper	Camper	Trailer	Tent		
		Days	Visits	Days	Days	Days		
Millpond	51	3776	2185	102	191	206		
Rock Creek	43	2655	2068	122	219	244		
Cavitt Creek	32	2581	1101	61	94	132		
Tyee	25	1589	1153	50	120	80		
Scaredman	16	12,791	6507					
Lone Rock	12							
Emile	14							
	193	17,370		335	624	662		

The above figures were taken by sampling, and the results indicated actual use was about 50% of capacity. The actual use of other areas above were not accurately sampled. The average daily use figure of 193 x 90 days = 17,370 visitor days.

As seen from the preceding County Parks Table, total camper vehicle days at supervised parks numbered 12,503 in 1970. One-half of the total visitors and 40 percent of the vehicles were registered at Salmon Harbor (Windy Cove). Whistlers Bend campground accounted for 10 percent of the vehicles. In 1963 the State Highway Department (#7) placed attendance at Douglas County Parks at 2990, but the validity or derivation of this figure is not known. The 1970 use is 12,503 by accurate count, an increase of 321 percent, but of course facilities were also increased, and the expansion figure needs some clarification.

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BLM Campground Use - June through Labor Day, 1963

	Av. Daily	Visitor	Camper	Pick-up	Trailer	Total
	Use	Days	Visits	Days	Days	Days
Millpond	51	3775	2182	102	191	206
Rock Creek	43	2022	2068	122	219	244
Cavitt Creek	32	2281	1101	61	94	132
Tyee	22	1289	1123	20	120	80
Scarschman	16					
Loon Rock	12					
Emile	14					
	<u>193</u>			<u>332</u>	<u>624</u>	<u>662</u>

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The Oregon State Highway Department placed total visitors
in Douglas County in 1965 as follows:

<u>Ownership</u>	<u>Day Visits</u>	<u>Night Visits</u>	<u>Total Visitors</u>
State Parks	437,354	26,522	463,876
County Parks	605,620	2,990	608,610

Multipy with a 3% annual increase x 5 years as follows:

State Parks	502,957	30,500	533,457
County Parks	<u>696,463</u>	<u>3,438</u>	<u>699,901</u>
	1,199,420	33,938	1,233,358

The per person expenditure is estimated at \$8.65 according to
statistics referred to in the opening paragraph of this section.

The value to the economy is therefore \$10,668,546.

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	1,199,410	33,938	1,233,358

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Present Situation The Umpqua is about 194 miles in length to the head of

E. Water The Umpqua River flows from the headwaters on the Knappton River Divide. The North Umpqua has

This section will attempt to deal with the supply and the production of this resource, both public and private lands, and deal with the demands for water, both consumptive and non-consumptive. Included will be estimates of quantity, quality, recharge characteristics, and use of ground water.

Weather records began sparsely in 1856 at old Fort Umpqua at Elkton. Continuous readings began in Roseburg in 1877. The six principal stations of recording weather are at Drain, Elkton, Reedsport, Riddle, Roseburg, and Toketee Falls.

The county boundary practically fits the rim of the Umpqua Basin. The eastern edge of the county lies in the Cascade Mountains with a band of peaks ranging in height from 4,264 feet to 9,173 feet. Desert Ridge on the south separates Cow Creek and the Rogue River. The Calapooya Mountains separate the Umpqua Basin from the Willamette Basin.

The elevation through the fairly flat belt in the center of the county is 500-700 feet, from which the river falls to the sea is about 70 miles from Roseburg, or about six feet per mile. The approximate length of the river is 211 miles, mouth to headwaters, via the main stem and the North Umpqua, which in itself is approximately 106 miles to Diamond Lake.

Discharge Tabulation

The South Umpqua is about 104 miles in length to the head of Castle Rock Creek on the Rogue River Divide. The North Umpqua has a gradient of about 19 feet per mile for the first 68 miles to Boulder Creek. The average gradient above this point is 83 feet per mile.

Beginning with the 1961 water year, which is considered to be October 1st through September 30th, surface water records have been released by the Geological Survey. They are tabulated by each day, each month; and very useful information, in addition to the following table, is available. Location of gaging stations should be verified. Land ownership has not been computed for drainages, but apportionment of water runoff could be developed. Inches of rain varies from about 67 inches at Reedsport to 34 inches at Toketee Falls, and 24 inches at Riddle.

C.
IV

Jackson Creek near Tillier	15.2	26,500	2.15	14	321,700
South Umpqua near Riddle	15.2	26,500	2.15	14	321,700
Elk Creek near Drew	15.2	26,500	2.15	14	321,700
Elk Creek near Asotin	15.2	26,500	2.15	14	321,700
W. Fork Elk Creek near Riddle	15.2	26,500	2.15	14	321,700
South Umpqua near Riddle	15.2	26,500	2.15	14	321,700
No. Umpqua - Myrtle Creek	15.2	26,500	2.15	14	321,700
Oalla Creek - Tenmile	15.2	26,500	2.15	14	321,700
Lookingglass Creek - Tenmile	15.2	26,500	2.15	14	321,700
South Umpqua River - Brockway	15.2	26,500	2.15	14	321,700
Elk Creek - Tenmile	15.2	26,500	2.15	14	321,700
North Umpqua - Toketee Falls	15.2	26,500	2.15	14	321,700
Clear Fork Umpqua - Tenmile	15.2	26,500	2.15	14	321,700
Umpqua River - Condon	15.2	26,500	2.15	14	321,700
North Umpqua - Tenmile	15.2	26,500	2.15	14	321,700
Steamboat Creek - Glide	15.2	26,500	2.15	14	321,700
Rock Creek - Tenmile	15.2	26,500	2.15	14	321,700
North Umpqua - Winchester	15.2	26,500	2.15	14	321,700
Umpqua River - Elsie	15.2	26,500	2.15	14	321,700
Elk Creek - Riddle	15.2	26,500	2.15	14	321,700
Elk Creek - Grain	15.2	26,500	2.15	14	321,700
Umpqua River - Scottsburg	15.2	26,500	2.15	14	321,700
Smith River - Gardiner	15.2	26,500	2.15	14	321,700

*Cubic feet per second per square mile is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area. CFS is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

#1968 C.F. readings discontinued June 1968.

Discharge Tabulation

Gaging Station	Drainage Area	Acre Feet	*C.F.S.	Record Period	
	Sq. Mile	1969 Water Yr.	per Sq. Mile	Yrs.	Av. Ac. Ft.
Jackson Creek near Tiller	152	236,900	2.15	14	221,700
South Umpqua River at Tiller	449	790,900	2.43	31	736,100
Elk Creek near Drew	54.4	62,250		15	59,480
Days Creek at Days Creek	55.3	36,380		14	31,730
Cow Creek near Azalea	78.0	78,630	1.39	39	78,250
W. Fork Cow Creek - Glendale	86.9	218,500	3.47	14	200,700
Cow Creek near Riddle	456	713,500		15	655,700
South Myrtle Creek - Myrtle Cr.	43.9	53,370		14	46,950
No. Myrtle Creek - Myrtle Creek	54.2	61,180		14	53,830
Olalla Creek - Tenmile	61.3	80,180		13	73,170
Tenmile Creek - Tenmile	29.6	55,520		2	
Lookingglass Cr. - Brockway	158	236,800		14	218,800
South Umpqua River - Brockway	1,670	2,341,000		35	2,076,000
Deer Creek - Roseburg	53.2	59,000		14	56,580
North Umpqua - Toketee Falls	170	288,700		41	300,700
Clear Water River - Trap Cr.	41.6	120,200	3.99	41	121,700
Fish Creek - Camas R. S.	68.8	169,100	3.40	22	172,400
North Umpqua - Copeland Creek	475	1,029,000		20	1,098,00
Steamboat Creek - Glide	227	578,600	3.52	13	510,000
Rock Creek - Glide	97.4	289,400	4.10	12	253,600
North Umpqua - Winchester	1,344	2,839,000		26	2,631,000
Calapooya Creek - Oakland	210	379,700	2.50	14	358,600
Umpqua River, Elkton	3,683	5,965,000	2.24	64	5,387,000
Elk Creek - Elkhead	28.7	48,190	2.32	1	
Elk Creek - Drain	104	172,200	2.29	14	160,800
Umpqua River - Scottsburg	4,095	5,325,000#	1.79	3	
Smith River - Gardiner	206	651,500	4.37	4	

*Cubic feet per second per square mile is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area. CFS is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

#1968 C.Y. readings discontinued June 1969.

The County Water Resources Survey office places the value of an acre foot of water for irrigation purposes at \$12 to \$19.50 at the point of application. Domestic water costs about 1/3 more, and in some areas of the West, this ratio may be twice the cost.

The runoff discharge from district wide BLM lands has not been computed, as a process of averaging between drainages would not be entirely useful. The process of relating acre feet runoff at specific gaging stations for URA water production, figures should be done as good data is available. Municipal water supply needs over much of the County are met by diverting water from creeks and rivers, and this impact can be developed.

There are extensive water storage studies going on at present, and it is reasonable to anticipate more sizeable dam construction in the future. Three destructive floods in the past 15 years will improve the benefit ratio to be derived. It is conceivable that irrigation water from up-river storage will be used in reforestation needs to increase timber growing stock. Evaporative moisture in the air may also effect reforestation and fire control.

Economic implications associated with water resources of the Umpqua River System are many and complex; some of the questions are as follows:

1. What is the value of an acre foot of water, and for what uses - domestic needs, irrigation needs, power site needs, fishery needs.

2. Water temperatures - fishery impact, stream flow regulation to hold water temperature 70° or below.

3. Recreation needs - water storage uses, relationship to users.

4. Dam construction - will future electric power come from water power, storage, allowable cut, flood control (damage costs and rehabilitation costs), siltation, fishery impact.

5. Population needs for water will be first priority, present and projected.

6. Water quality - watershed importance, policy and standards of management, pollution control and abatement.

7. Ground water - utilization, effect on Umpqua Basin discharge.

8. Timber management - relationship of forest cover to runoff, silvicultural practices applied will have diverse effects.

9. Land ownership pattern - intermingling of federal, state, and private lands will have effect on policy and management decision.

Coos Bay has a 100 cfs diversion right from the North Umpqua that may be replaced from the Coquille River and the Sand Dunes area.

A few towns within the district are faced with necessary expansions of their water supply, and more mutual planning instead of individual system planning should come about in the future.

There is a very comprehensive County Sewage Plan, and BLM association with this problem will no doubt increase in the future with the proliferation of subdivision activity and homesite building adjacent to scattered ownership in narrow drainages.

2. Water temperatures - fishery impact, stream flow

regulation to hold water temperature 70° or below.

3. Recreation needs - water storage needs, relationship

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water power, storage, allowable cut, flood control (damage costs

and rehabilitation costs), utilization, fishery impact.

5. Population needs for water will be first priority.

present and projected.

6. Water quality - watershed importance, policy and

standards of management, pollution control and abatement.

7. Ground water - utilization, effect on Upper Basin

discharge.

8. Timber management - relationship of forest cover to

timber, silvicultural practices applied will have diverse effects.

9. Land ownership pattern - intermingling of federal, state,

and private lands will have effect on policy and management

decision.

Table 3

Municipal Water Supply Data

Community	Population	Source of Water Supply	Legal Diversion Right-cfs
Canyonville	1,143	O'shea Creek	1.00
Coos Bay	14,200	North Umpqua (out of basin)	100.00
Dixonville Water Association		Contract - Roseburg	
Drain	1,022	Bear Creek	4.00
Elkton	143	Springs, Umpqua River	0.50
Gardiner	400	Stream at Fisher's Cove	
Glide	100	Little River	0.10
Glendale	752	Section Creek, Mill Creek, Springs, and Cow Creek	1.82
Lookingglass Water Association	790	Contract - Umpqua Basin	
Myrtle Creek	2,593	Harrison-Young branch of North Myrtle Creek	7.17
Oakland	856	Calapooya Creek and wells	2.00
Reedsport*	3,935	Clear Lake (out of basin)	25.00
Riddle	1,050	Judd Creek, unnamed creek of So. Umpqua, Wilson Creek and Cow Creek	2.75 2.75
Roberts Creek Water District	4,000	Cooper Creek of Roberts Creek - So. Umpqua River	1.22
Roseburg	14,253	North Umpqua River	25.00
Scottsburg	120	Creek	
Sutherlin	2,812	Calapooya Creek	3.00
Tri-City Water District			
Umpqua Basin Water Association**	2,800	North Umpqua River	3.25
Winston-Dillard Water District	3,045	South Umpqua River	1.50
Yoncalla	641	Adams Creek and Wilson Creek	1.50

* Serves Winchester Bay

** Serves Wilbur, Riverside, Garden Valley and Melrose

Source: State Water Resource Board

182.56

$$1690 \times 182.56 = 29,210 \text{ cfs}$$

DOUGLAS COUNTY

Umpqua Sub-Basin Areas

Sub-basin	Drainage Area Sq. Mi.	Total Sq. Mi.
LOWER UMPQUA RIVER		
Smith River	347	
Mill Creek	135	
Elk Creek	290	
Calapooya Creek	247	
Miscellaneous Streams	<u>471</u>	
		1,490
NORTH UMPQUA RIVER		
Little River	206	
Rock Creek	93	
Steamboat Creek	220	
Copeland Creek	34	
Fish Creek	82	
Clearwater River	70	
Miscellaneous Streams	<u>603</u>	
		1,308
SOUTH UMPQUA RIVER		
Deer Creek	63	
Roberts Creek	24	
Lookingglass Creek	160	
Myrtle Creek	117	
Cow Creek	397	
West Fork Cow Creek	87	
Canyon Creek	37	
Elk Creek	80	
Jackson Creek	155	
Miscellaneous Streams	<u>642</u>	
		<u>1,762</u>
GRAND TOTAL UMPQUA RIVER BASIN		4,560

Note - The above figures may not always agree with drainage areas from the foregoing table due to placement of the gaging stations.

DOUGLAS COUNTY

Water Use

Domestic

Domestic supplies are household and minor irrigation uses by individuals not served by municipalities or other public corporations. The sources of domestic supplies in Douglas County are: (1) surface supplies from rivers and springs; and (2) wells. Rough field reconnaissance indicates that the use of ground water for domestic supplies is limited due to the undependable nature of these supplies with respect to quality and quantity.

Municipal

Municipalities and public corporations rely primarily on the surface waters of the Umpqua system. Some supplies, particularly those located in the South Umpqua system, have greatly reduced supplies from July through November. Urban expansion in this area could be restricted if adequate supplies for municipal purposes are made available during periods of low summer flow.

Power

Power supplies within the county are adequate for the immediate future. The estimated physical power potential of the Umpqua system is about 25 per cent developed. Improvements in the flow patterns of the streams of the system would offer increased power production in many cases. Adequate supplies can be considered available as long as undeveloped sites remain from which power can be produced at a marketable cost.

Mining

Mining operations in the county are, to a large extent, located in the headwaters of small tributaries of the Umpqua system. Existing rights for this use are often in excess of natural stream flows during summer months. Actual use for mining is relatively small.

Recreation

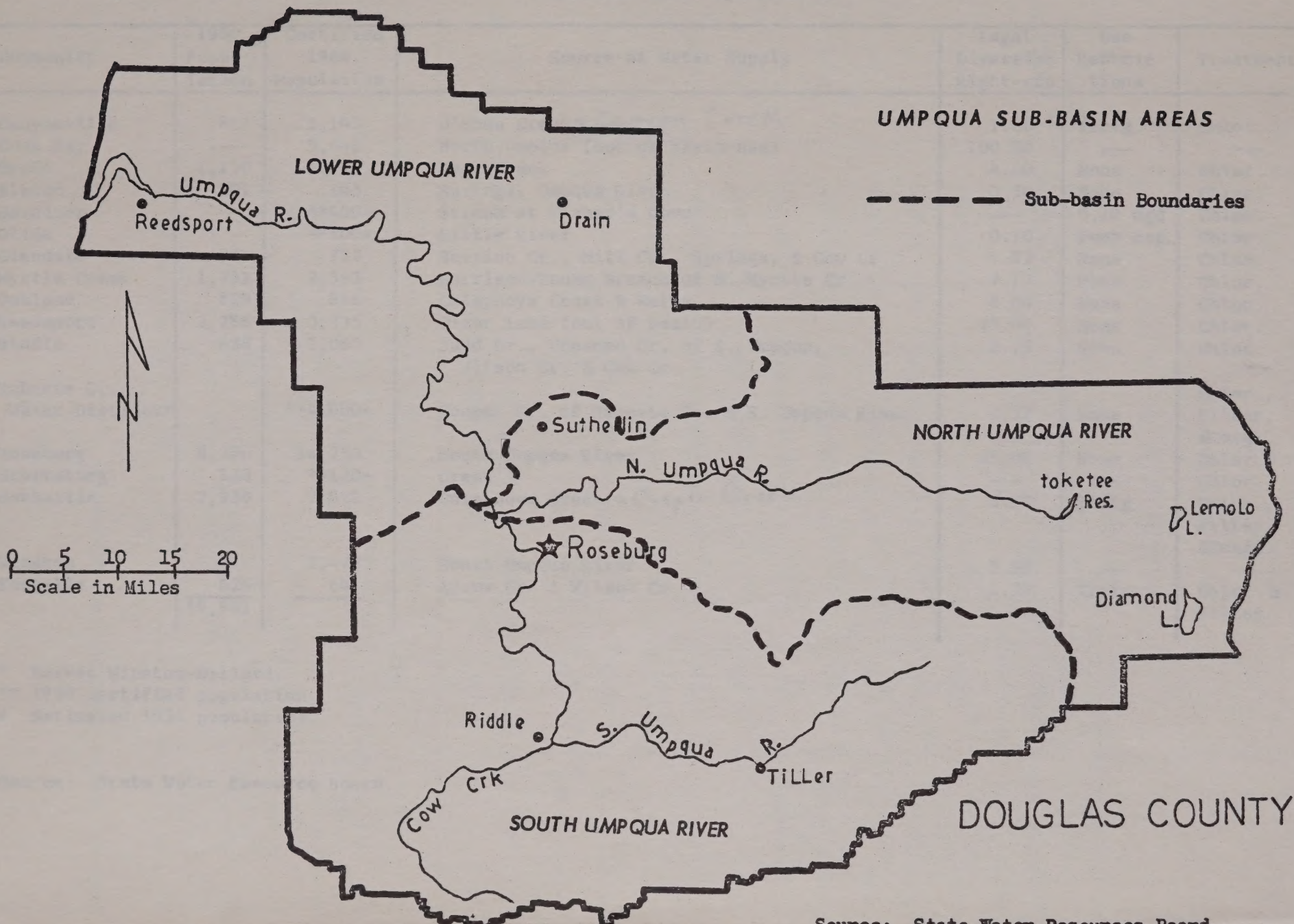
The needs for sufficient quantities of water for recreational uses are of great importance to Douglas County. Most of the income from outdoor recreation that comes into the county stems from some phase of recreation allied with water. The game fishing of the Umpqua is one of the important recreation values of the county. Developments receiving greatest use are Diamond Lake and the areas along the major streams.

Source: State Water Resource Board

SUMMARY OF WATER RIGHTS IN CUBIC FEET PER SECOND
AS OF JANUARY 1, 1958

Sub-basin	Consumptive Rights							Nonconsumptive Rights			Totals
	Dom.	Camp	Stock	Irrig.	Pond	Munic.	Indust.	Power	Mining	Fish	
LOWER UMPQUA R.											
Smith River	0.32			0.71				300.00			301.03
Mill Creek	0.23			1.54		15.00					16.77
Elk Creek	0.84		0.01	24.76	3.75	5.50	2.81	2.62			40.29
Calapooya Creek	0.14	0.76	0.05	25.83	2.00	5.00					33.78
Misc. Streams	<u>3.70</u>	<u>0.08</u>	<u>0.02</u>	<u>31.73</u>	<u>2.28</u>	<u>1.00</u>	<u>49.17</u>	<u>0.18</u>			<u>88.16</u>
TOTAL	5.23	0.84	0.08	84.57	8.03	26.50	51.98	302.80			480.03
	<u>Total Consumptive 177.23</u>							<u>Total Nonconsumptive 302.80</u>			
NORTH UMPQUA R.											
Misc. Streams	2.30	1.25	0.03	29.88	6.38	112.00	46.46	3575.65	0.15	61.08	3835.18
	<u>Total Consumptive 198.30</u>							<u>Total Nonconsumptive 3636.88</u>			
SOUTH UMPQUA R.											
Deer Creek	0.23			4.85	5.96			10.18			21.22
Roberts Creek	0.04			0.39		0.55					0.98
Lookingglass Cr.	0.11			16.06	0.40			5.17	23.00		44.74
Myrtle Creek	0.75		0.02	19.80	2.81	1.00	0.67	10.00	14.57		49.62
Cow Creek	2.94	0.02	0.17	54.67	10.15	4.52	33.14	8.25	262.13	0.17	376.16
Misc. Streams	<u>7.17</u>	<u> </u>	<u>0.02</u>	<u>77.75</u>	<u>11.09</u>	<u>8.12</u>	<u>1.53</u>	<u>0.07</u>	<u> </u>	<u> </u>	<u>105.75</u>
TOTAL	11.24	0.02	0.21	173.52	30.41	14.19	35.34	33.67	299.70	0.17	598.47
	<u>Total Consumptive 264.93</u>							<u>Total Nonconsumptive 333.54</u>			

Source: State Water Resources Board



DOUGLAS COUNTY

MUNICIPAL WATER SUPPLY DATA

Community	1950 Popu- lation	Certified 1964 Population	Source of Water Supply	Legal Diversion Right-cfs	Use Restric- tions	Treatment
Canyonville	861	1,143	O'Shea Creek <i>+ Canyon Creek</i>	1.00	Irrig.	Chlor.
Coos Bay	---	9,043	North Umpqua (out of basin-use)	100.00	---	---
Drain	1,150	1,022	Bear Creek	4.00	None	Chlor.
Elkton	201	143	Springs, Umpqua River	0.50	None	Chlor.
Gardiner		**400+	Stream at Fisher's Cove	---	0.10 mgd	Chlor.
Glide		**100+	Little River	0.10	Pump cap.	Chlor.
Glendale	871	752	Section Cr., Mill Cr., Springs, & Cow Cr.	1.82	None	Chlor.
Myrtle Creek	1,781	2,593	Harrison-Young Branch of N. Myrtle Cr.	7.17	None	Chlor.
Oakland	829	856	Calapooya Creek & Wells	2.00	None	Chlor.
Reedsport	2,288	3,935	Clear Lake (out of basin)	25.00	None	Chlor.
Riddle	634	1,050	Judd Cr., Unnamed Cr. of S. Umpqua, Wilson Cr. & Cow Cr.	2.75	None	Chlor.
Roberts Cr. Water District*		**4,000+	Cooper Cr. of Roberts Cr. & S. Umpqua River	1.22	None	Chlor., Filter, &Coagu.
Roseburg	8,390	14,253	North Umpqua River	25.00	None	Chlor.
Scottsburg	120	**120+	Creek	---	---	Chlor.
Sutherlin	2,230	2,812	Calapooya Creek <i>+ Cooper Creek</i>	3.00	Irrig.	Chlor., Filter, &Coagu.
Winston		2,472	South Umpqua River	2.57	---	---
Yoncalla	626	641	Adams Cr. & Wilson Cr.	1.50	Irrig.	Chlor. & Filter
	19,981					

* Serves Winston-Dillard.

** 1958 certified population.

+ Estimated 1956 population.

Source: State Water Resource Board.

DOUGLAS COUNTY

SEWAGE TREATMENT PLANTS

Name	Year Constructed	Treatment Units	Design Population	Population Served
Drain	Under Constr.	ScCmFtDCmEgBo	2,000	
Glendale	1930	Cs	500	800
Glendale	1957	Sc(CmDpCm)FthEgcBo	1,000	
Milo	1956	CiFthCpEh	450	300
Myrtle Creek	1952	ScCmFthCmEgDcpBo	3,000	2,000
N. Roseburg	1951	ScCmFt2hCmEgDfhBo	4,000	5,400
Riddle	1952	ShCmFthCmEgcDcpBo	2,000	1,000
Roseburg	1940	ShCmFtrCmEgDchBo	6,000	9,000
Roseburg	Under Constr.	ScCmFtDCmEgBo	20,000	
Sutherlin	1956	ShGhCmFtrCmEgDchBo	3,500	2,500
Sutherlin Hsg.	1953	CsEgc	350	350
Winston	1953	CsFsEh	175	150
Winston	1957	ScCmFthCmEgcDcm	3,500	

Treatment Abbreviations

Bo	Open sludge beds	Egc	Gas chlorination, separate contact tank
Ci	Imhoff tank	Eh	By hypochlorite
Cs	Septic tank	Fs	Intermittent sand filters
Cm	Mechanically equipped tank	Fth	High rate or capacity filter
Cp	Plain hopper bottom tank	Ft2h	Two stage high capacity filter
Dch	Digester, fixed cover, heated	Ftr	Standard rate filter with rotary distributor
Dcp	Digester, fixed cover, unheated	Gh	Hand cleaned grit chamber
Dfh	Digester, floating cover, heated	Sc	With shredder or grinder, comminutor
Dp	Unheated	Sh	Hand cleaned bar rack
Eg	By chlorine gas		

Source: Oregon State Sanitary Authority.

DOUGLAS COUNTY

LIST OF EXISTING HYDROELECTRIC POWER PROJECTS

Name of Owner	Name of Plant	River	Installed Capacity KW	Av. Annual Generation 1,000 KWH	Gross Head Ft.
The Calif.-Ore. Power Company	Winchester	N. Umpqua	500	3,900	14
The Calif.-Ore. Power Company	Soda Springs	N. Umpqua	11,000	55,000	114
The Calif.-Ore. Power Company	Slide Creek	N. Umpqua	18,000	94,000	179
The Calif.-Ore. Power Company	Toketee Falls	N. Umpqua	42,550	220,000	448
The Calif.-Ore. Power Company	Fish Creek	N. Umpqua	11,000	68,000	1,032
The Calif.-Ore. Power Company	Clearwater 1	N. Umpqua	15,000	54,000	651
The Calif.-Ore. Power Company	Clearwater 2	N. Umpqua	26,000	88,000	760
The Calif.-Ore. Power Company	Lemolo 1	N. Umpqua	29,000	120,000	750
The Calif.-Ore. Power Company	Lemolo 2	N. Umpqua	<u>33,000</u>	<u>162,000</u>	721
			186,050	864,900	

Source: Hydroelectric Power Resources of the United States Developed & dated 1957 by Federal Power Commission, Washington, D. C.

The North Umpqua has undeveloped sites of considerable power potential. Undeveloped power potential for the North Umpqua totals at least 180,000 kilowatts capacity, almost the equivalent of the existing California-Oregon Power Company development above Toketee Falls on this same stream. Future possibilities of a limited nature exist elsewhere in the Umpqua system.

The main stem of the Umpqua has potential for power development. Federal Power Commission figures indicate the possibility of an installed capacity of approximately 130,000 kilowatts. With proper storage facilities, this figure could be revised upward possibly to a range of 200,000-220,000 kilowatts.

DOUGLAS COUNTY

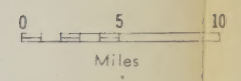
LIST OF POTENTIAL POWER PROJECTS

Name of Project or Site	River	Installed Capacity KW	Av. Annual Generation 1,000 KWH	Gross Head Ft.
<u>LOWER UMPQUA</u>				
12 RD No. 3	Smith	3,000	13,000	130
12 RD No. 1	Smith	5,400	23,600	320
Loon Lake Diversion	Mill Creek	6,500	55,900	385
Scottsburg	Umpqua	38,100	290,000	100
Kelleys Smith Ferry	Umpqua	30,800	236,000	85
Kellogg	Umpqua	23,500	196,000	70
Wolf Creek	Umpqua	37,000	298,000	145
<u>NORTH UMPQUA</u>				
Winchester	N. Umpqua	13,400	89,000	80
Oak Creek	N. Umpqua	11,300	86,500	70
Horseshoe Bend	N. Umpqua	14,000	98,300	90
Glide	N. Umpqua	9,000	62,200	60
Rock Creek	N. Umpqua	51,000	263,000	221
Boundary	N. Umpqua	44,000	216,000	187
Steamboat	N. Umpqua	16,300	113,000	190
Copeland Diversion	N. Umpqua	24,300	175,000	290
Lake Creek No. 3	Lake Creek	3,600	9,800	325
Lake Creek No. 1	Lake Creek	5,000	13,000	480
<u>SOUTH UMPQUA</u>				
Roseburg	S. Umpqua	3,000	22,000	50
Dillard	S. Umpqua	3,600	26,000	60
Ruckles	S. Umpqua	2,800	21,000	50
Myrtle Creek	S. Umpqua	3,900	28,000	70
Riddle Diversion	S. Umpqua	5,800	44,000	125
Days Creek	S. Umpqua	4,900	24,100	100
Perdue	S. Umpqua	4,600	20,800	100
Coffee Creek	S. Umpqua	3,100	20,000	80
Tiller Diversion	S. Umpqua	6,200	39,800	160
Deadman Creek	S. Umpqua	3,100	21,000	175
		377,000	2,514,000	

Source: Hydroelectric Power Resources of the United States Developed & Undeveloped dated 1957 by Federal Power Commission, Washington, D. C.



- SUBBASINS
- 1 SOUTH UMPQUA
 - 2 NORTH UMPQUA
 - 3 LOWER UMPQUA



- Snow Survey Sites
- Precipitation Gages
- Stream Gages
- Proposed Dam Sites
- Dams - Completed

STATE WATER RESOURCES BOARD

UMPQUA BASIN

MAP NO. 16.4
JANUARY 1971

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